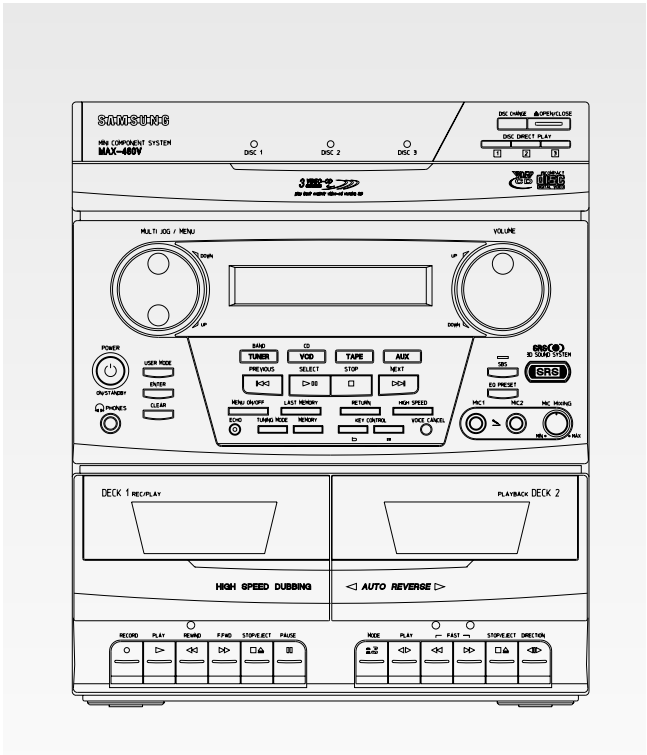
SAMSUNG

3 CD CHANGER VIDEO CD MINI MINI COMPONENT

MAX-460V

SERVICE Manual

3CD CHANGER MINI COMPONENT



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Code No. AH68-20139A

2. Specifications

General		Power source Power consumption Dimensions (mm)	220V 50Hz(Option) 150W 270(W) x 315(H) x 335(D)
Amplifier		Power output Total harmonic distortion Frequency range Signal to noise ratio Channel separation Input sensitivity	40W/CH(6Ω) 0.5% 20Hz ~ 20kHz 75dB 50dB 400mV
Tuner	FM	Frequency range Usable sensitivity Signal to noise ratio IF rejection ratio Total harmonic distoration Separation (Stereo)	87.5 ~ 108MHz 8μV 55dB 60dB 0.7% 23dB
	MW (AM)	Frequency range Usable sensitivity Signal to noise ratio IF rejection ratio Total harmonic distortion	522 ~ 1611KHz 600μV 40dB 45dB 2%
	LW (OPTION)	Frequency range Usable sensitivity Signal to noise ratio	146 ~ 290KHz 1250μV 35dB
Cassette		Frequecny range WOW FLUTTER Erasing effect Signal to noise ratio Total harmonic distortion	125Hz ~ 8KHz 0.35% 55dB 45dB 2%
Compact Disc		Frequency response Signal to noise ratio Channel separation Total harmonic distortion	20Hz ~ 20KHz(¡ 1dB) 95dB(1kHz 0dB) 75dB(1kHz 0dB) 0.05%(1kHz 0dB)

* Specifications are subject to change without notice.

3. Disassembly and Reassembly

3-1 Cabinet-Top

1. Remove 11 screws holding the cabinet-top.
2. Lift the back of the cabinet-top and slide it to the rear to remove. (See arrow)

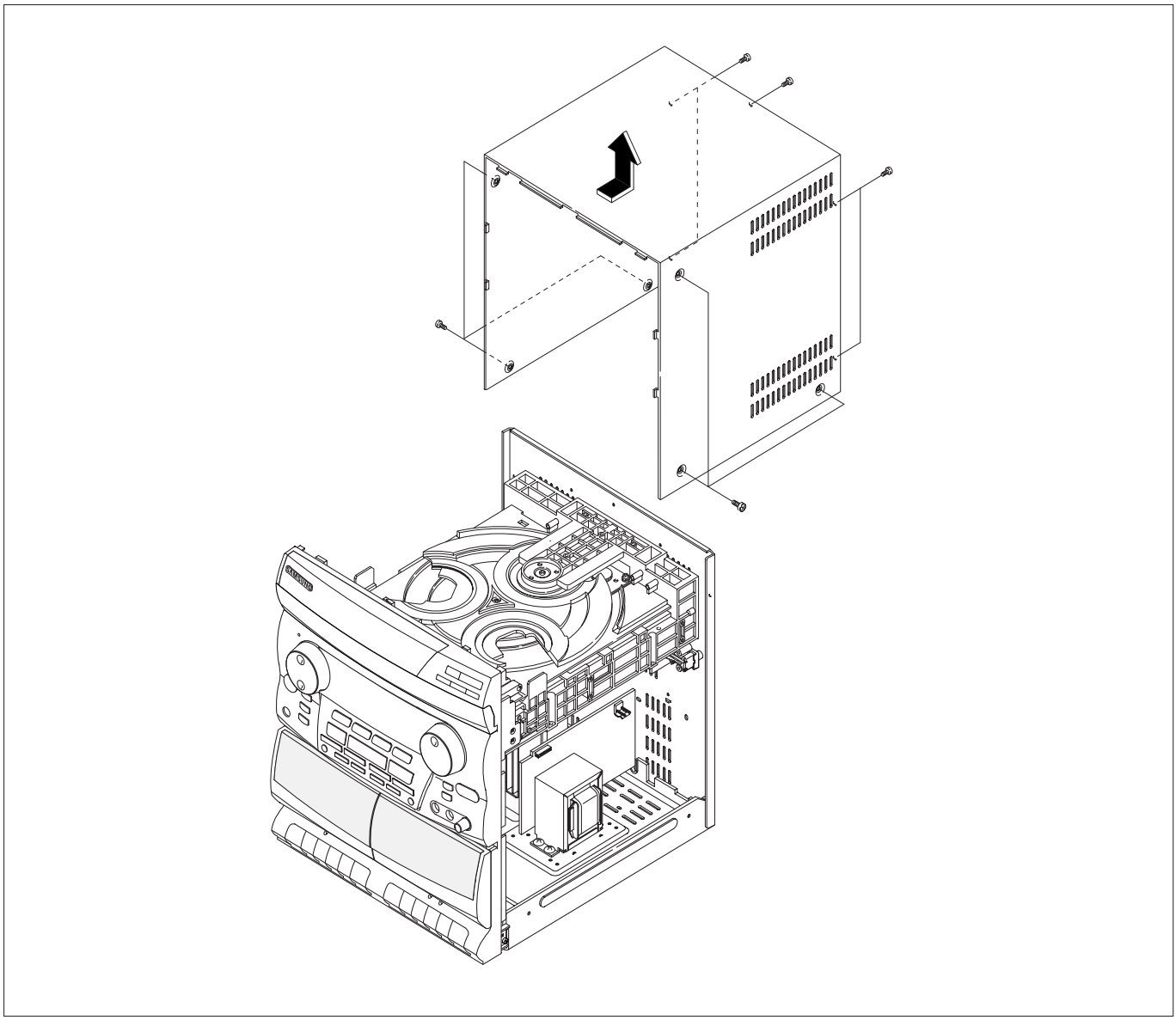


Figure 3-1

3-2 CD-MECHA, DOOR-CD

1. If power is connected :
   - Turn power on
   - Open the tray using the open/close key
   - Remove the Door in the direction of arrow #.

2. If power is not connected :
   - Turn the gear clockwise using a screw driver as shown in Figure 3-2- 1.
   - Pull the Tray in the direction of arrow @ and then remove the Door in the direction of arrow # .

3. Remove 2 screws $ and lift the CD-MECHA.

Figure 3-2-1

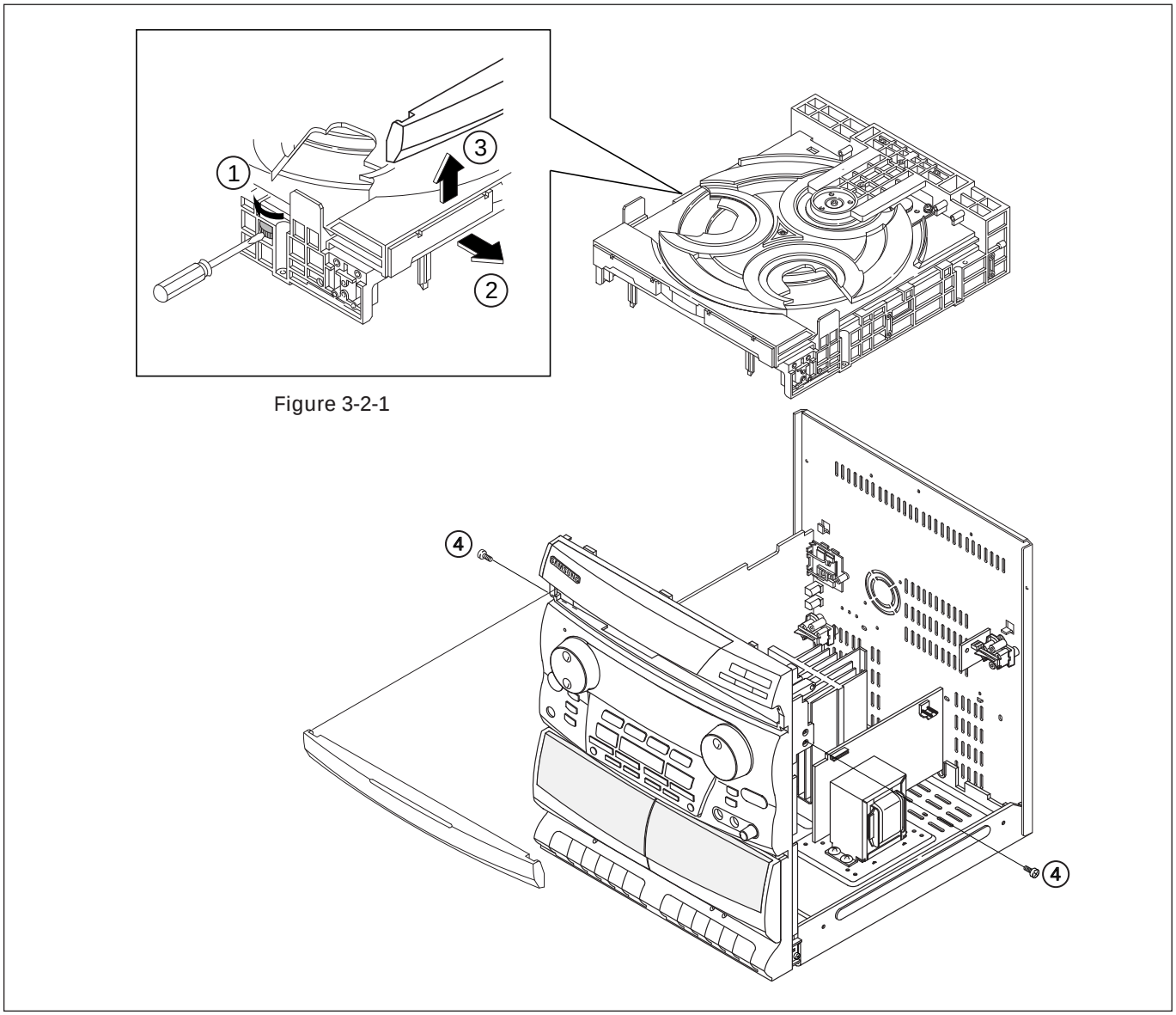


Figure 3-2

3-3 Cabinet-Rear and Main PCB

1. Remove 14 screws ⑤ and then lift the cabinet-rear ⑥ and slide it to rear to remove (see arrow).
2. Remove the Main-PCB ⑦ to rear.

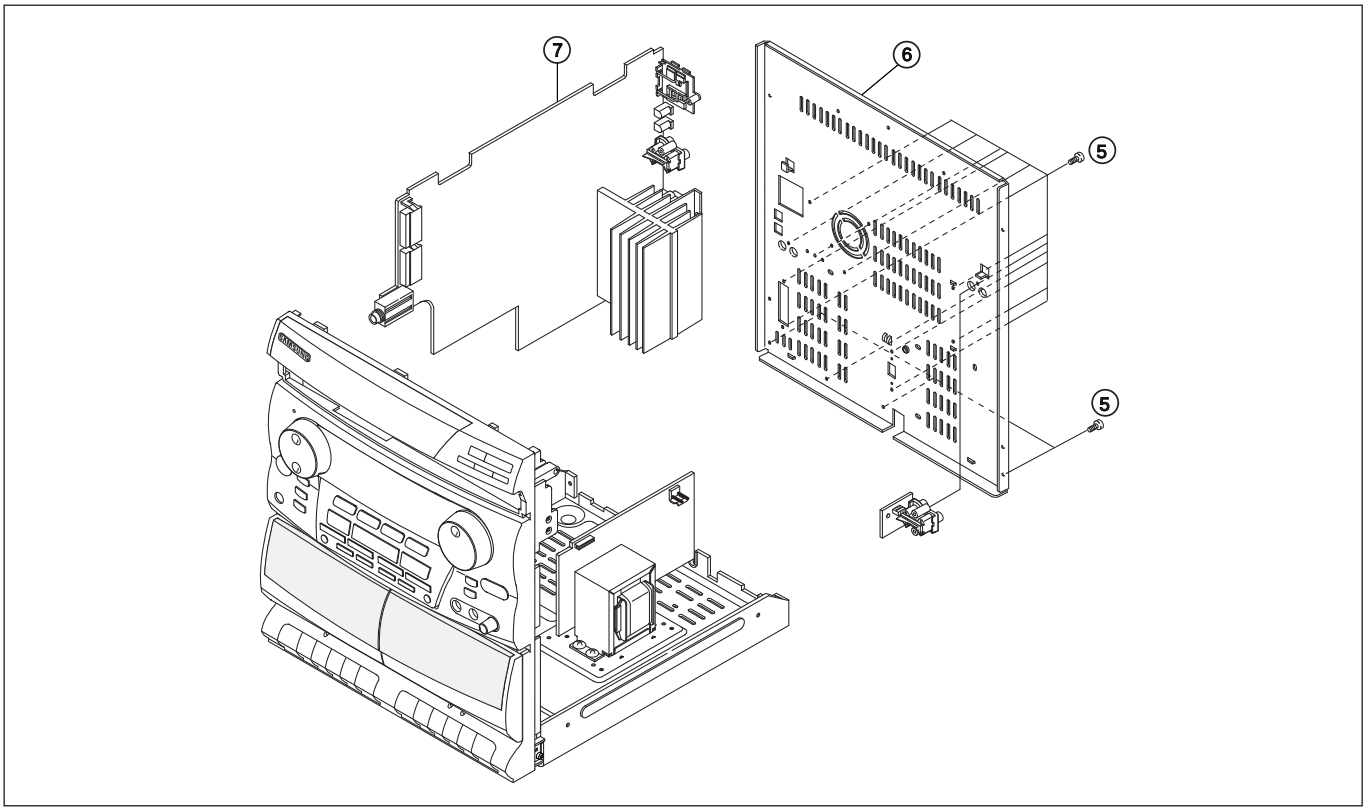


Figure 3-3

3-4 Cabinet-Front and Cabinet-Bottom

1. Remove 5 screws ⑧.
2. Remove the cabinet-rear by pushing the "A" and "B" as shown.

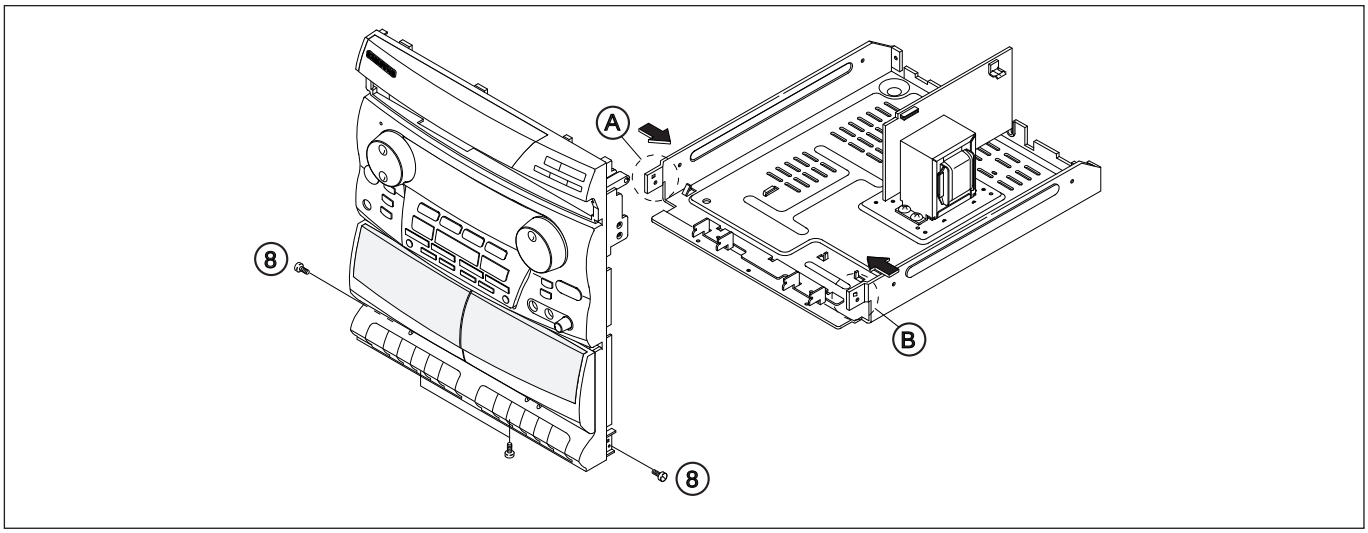


Figure 3-4

3-5 CD Mecha Main

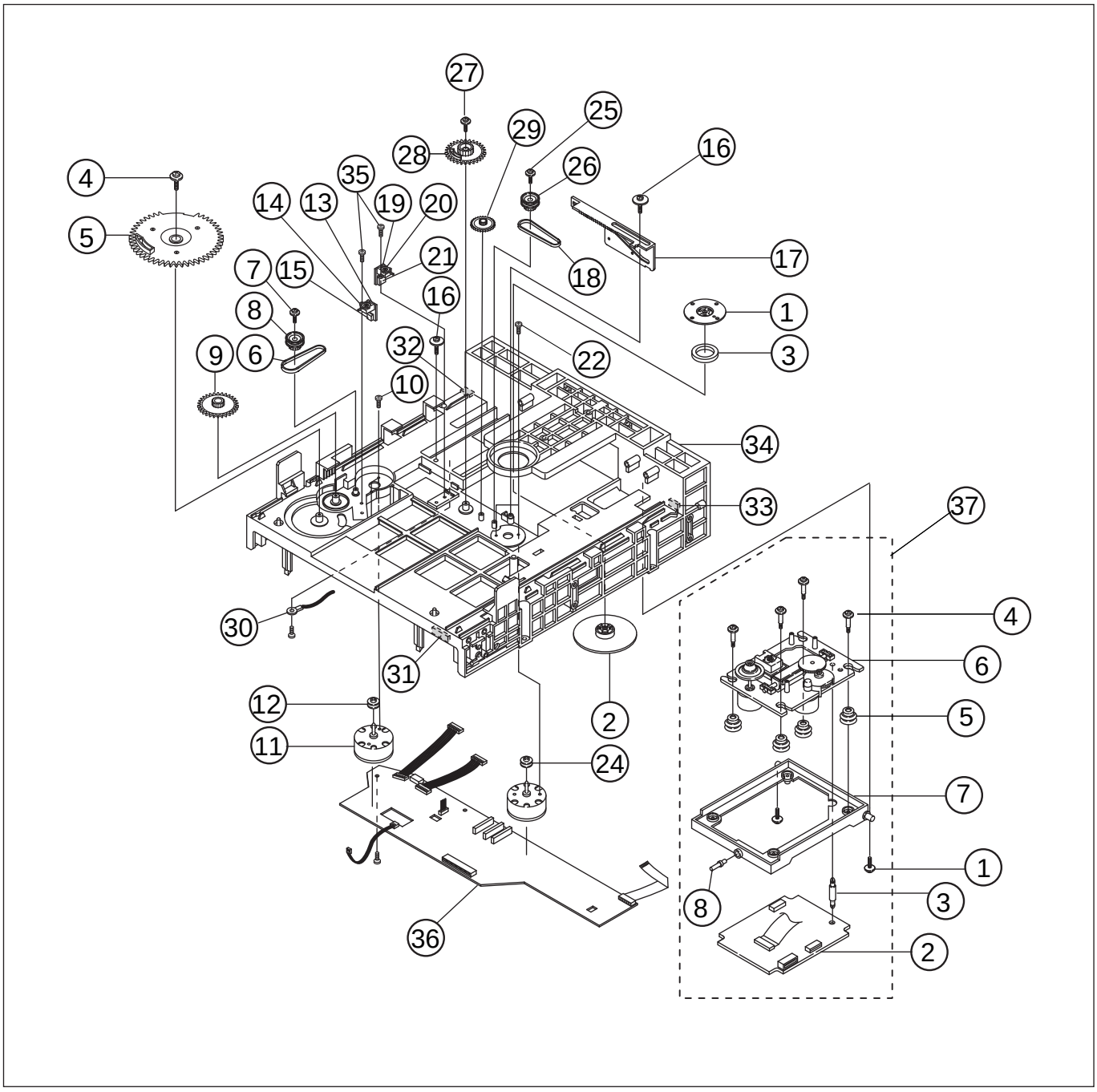


Figure 3-5

3-5 CD Mecha Main Continued

1. Turn the Bracket-chuck ① counter clockwise to remove.
2. Remove the Table-Chuck union ②.
3. Remove the Magnet-Chuck ③.
4. Remove the screw ④ and then lift the Gear-Tray(2) ⑤.
5. Remove the Belt-disc ⑥.
6. Remove the screw ⑦ and then lift the Gear-Pulley ⑧ .
7. Lift the Gear-Tray(1) ⑨ .
8. Remove 2 screws and then remove the Motor-DC ⑪.
9. Remove the Pulley-Motor ⑫.
10. Remove 1 screw ㉟ and then remove the PCB-SUB switch ⑬.
11. Remove the Switch-Micro ⑭ with using the soldering iron.
12. Remove the Connector-Wafer ⑮with using the soldering iron.
13. Remove 2 screws ⑯ and then remove the Gear-Cam ⑰.
14. Remove the Belt-Disc ⑱.
15. Remove 1 screw ㉟ and then remove the PCB-SUB switch ⑲.
16. Remove the Switch-Micro ⑳ and the Connector-Header ㉑.
17. Remove the Pulley-Motor ㉔.
18. Remove 1 screw ㉕ and then lift the Gear-Pulley ㉖.
19. Remove 1 screw ㉗ and then lift the Gear-UD(2) ㉘.
20. Lift the Gear-UD (1) ㉙.
21. Remove 1 screw and then remove the Clamp-Wire ㊸.

3-6 CD-PCB

* Refer to ㊲ of Figure 3-5.

1. Remove 2 screws ①.
2. Remove the PCB ② with using the soldering iron.
3. Remove the Hook ③.
4. Remove four Shaft-CD④ and then remove four Rubber-CD ⑤.
5. Remove the CD-Deck ⑥ and Lever-Lift ⑦ is removed automatically.
6. Remove the Shaft ⑧.

3-7 CD Mecha Tray

1. Remove 1 screw ① and then remove the Roulette ② .
2. Remove 6 Cushions ㉓ .
3. Remove 2 Washers ③ .
4. Remove the Gear-Roulette(2) ④ and then remove the Gear-Roulette (1) ⑤.
5. Remove 3 screws ⑥ and then remove three Cushion-Bracket ⑦ .
6. Remove 3 Cushion-Motors ⑧ .
7. Remove 2 screws ⑨ and then remove the Motor-DC ⑪ .
8. Remove the Bracket-Motor ⑩ .
9. Remove the Shaft-Motors(1) ⑪ .
10. Remove the Gear-Worm ⑫ from the Motor-DC.
11. Remove the PCB-SUB Motor(R) ⑬ with using the soldering iron.
12. Remove the A/S, C/wire ⑭ with a soldering iron.
13. Remove 1 screw ⑮ and then remove the connector-header ⑯, Sensor-Roulette ⑰ and the A/S, C/wire(FL) ⑱ with using a soldering iron.
14. Remove the PCB-SUB sensor(R) ⑲.

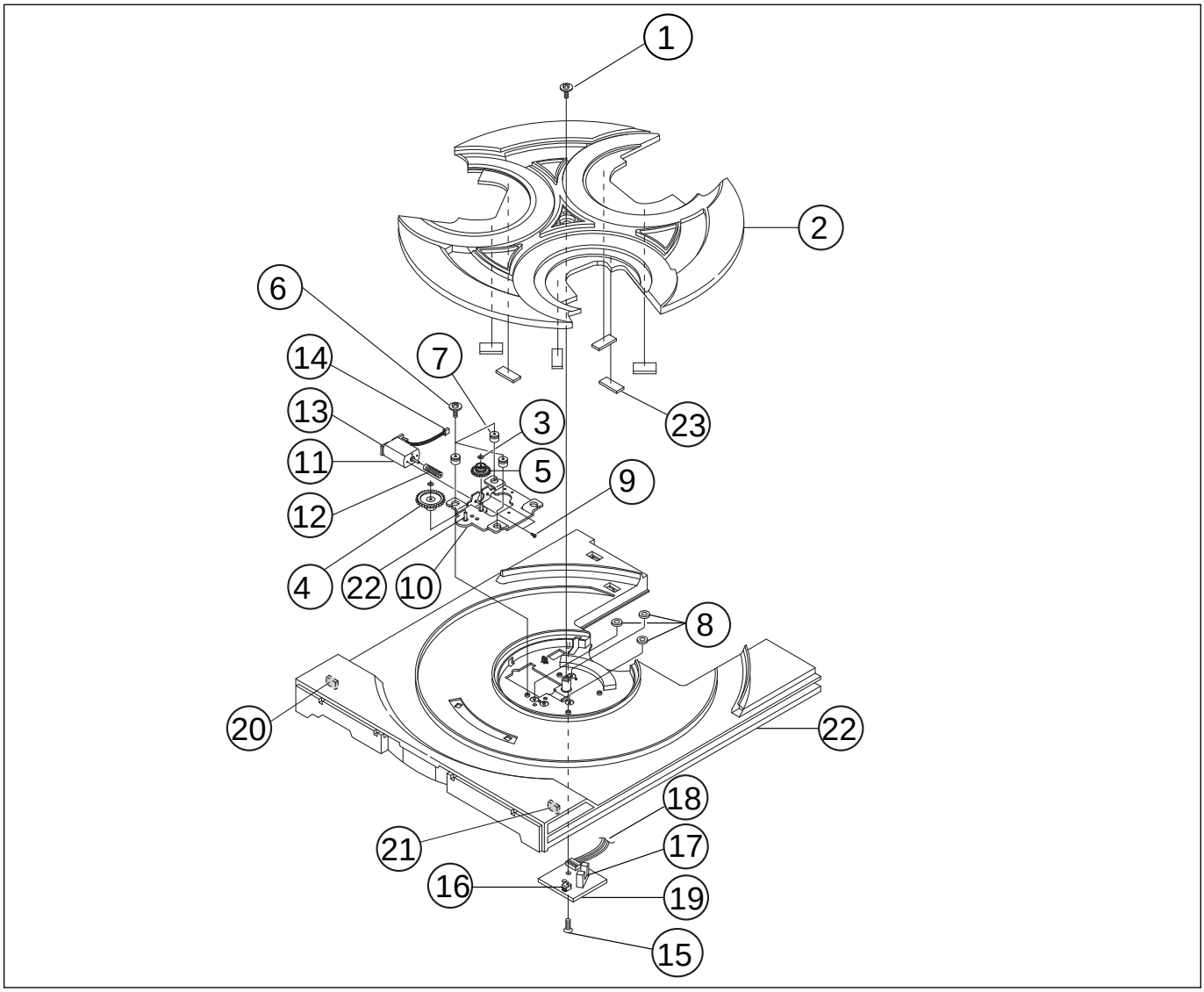


Figure 3-6

3-8 CD Deck

1. Remove the Shaft ① .
2. Lift the P/U ② .
   Note : Take extreme care not to touch the surface of lens.
3. Lift the Center-ring ③ .
4. Remove the Spring-T/Table ④ .
5. Remove the Turn-Table (M) ⑤ .
6. Remove 2 screw ⑥ and then remove the Spindle-Motor ⑦ .
7. Remove the Cover-Gear ⑧ by pushing the hook.
8. Remove the Gear(c) ⑨ by pushing the hook.
9. Lift the Gear(b) ⑩ .
10. Remove the Gear(a) ⑪ .
11. Remove 2 screws ⑫ and then remove the Feed-Motor ⑬ .
12. Remove the Chassis-Deck(M) ⑭.

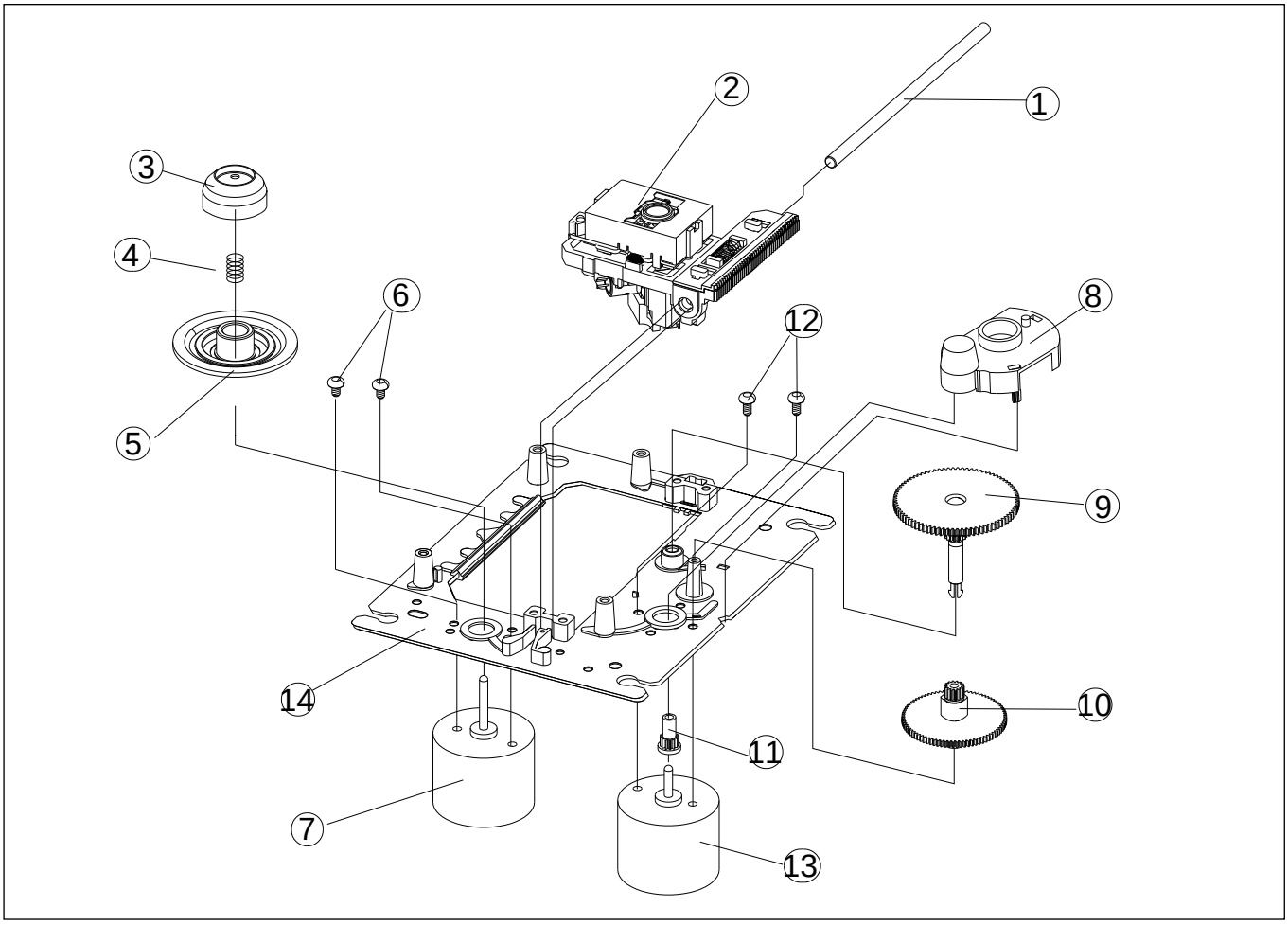
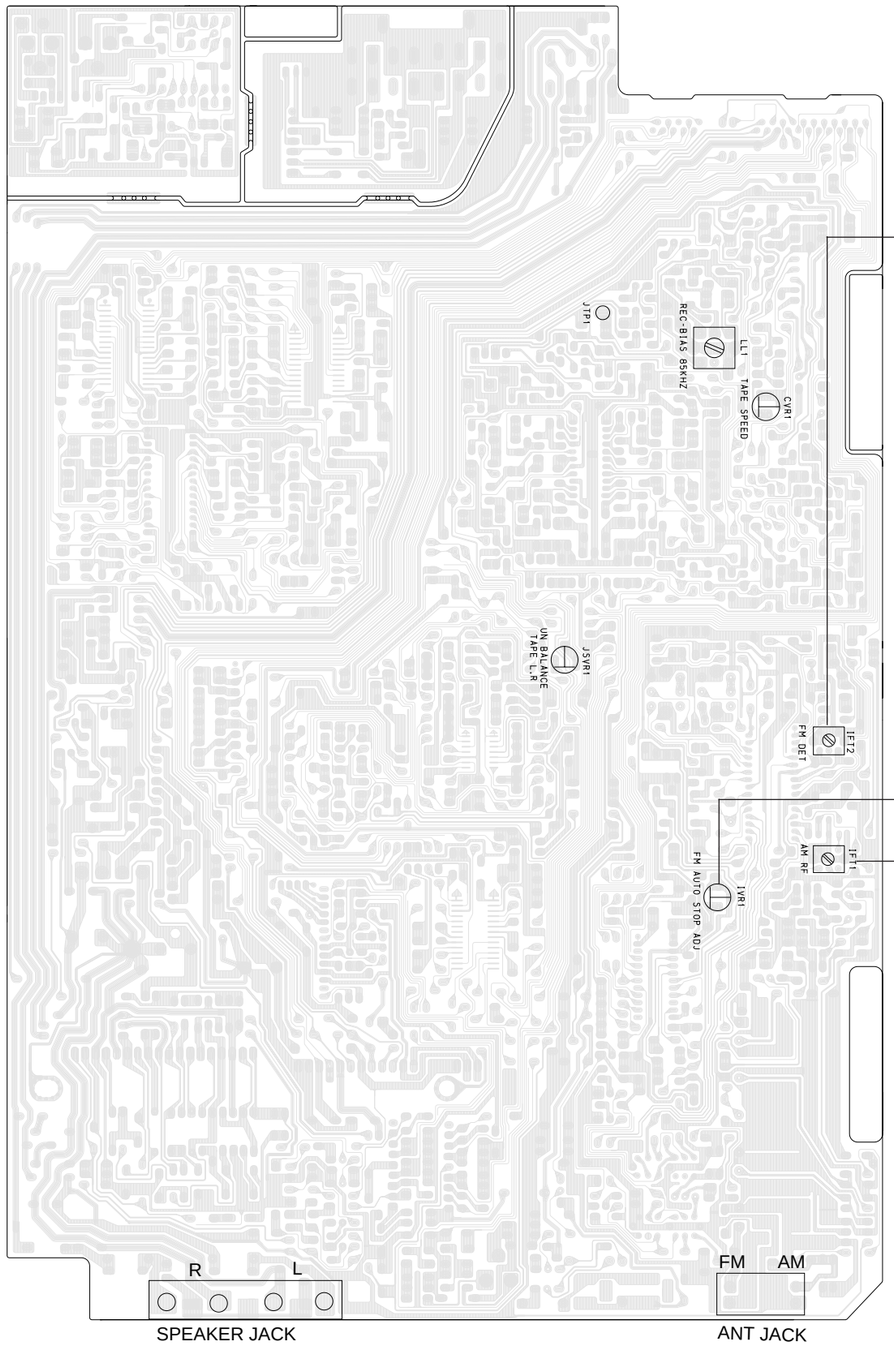


Figure 3-7

4. Alignment and Adjustments

4-1 Tuner



FM T.H.D Adjustment	
SSG FREQ.	98MHz
Adjustment point (IFT2)	FM DETECTOR COIL
Minumum Distortion(Figure 4-1)	

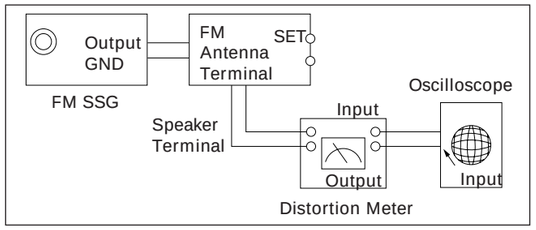


Figure 4-1 IF CENTER and T.H.D Adjustment

FM Search Level Adjustment	
SSG FREQ.	98MHz
Adjustment point (IVR1)	SEMI-VR(5KB)
"TUNED" is shown on FLT(Figure 4-2)	

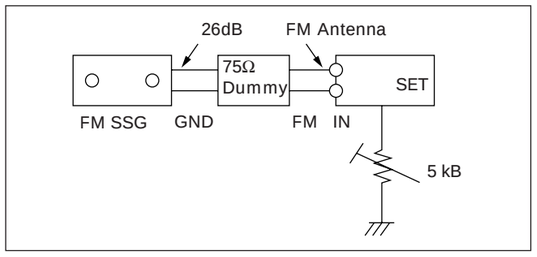


Figure 4-2 FM Auto Search Level Adjustment

AM(MW) I.F Adjustment	
SSG FREQ.	450KHz
Adjustment point (IFT1)	AM I.F COIL
Maximum output(Figure 4-3)	

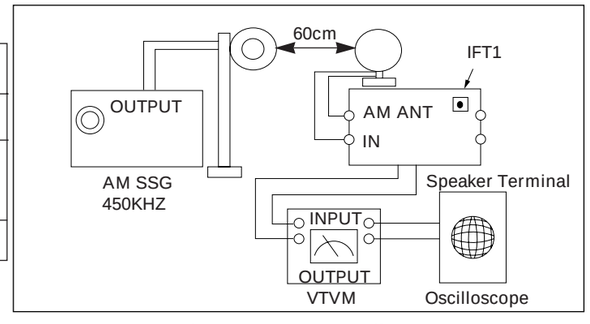


Figure 4-3 AM I.F Adjustment

4-2 Cassette Deck

4-2-1 Test Equipment

1. Oscilloscope
2. VTVM

4-2-1(a) TAPE

1. MTT-111 (or equivalent) : Test tape on which 3KHz signal is recorded (Tape speed adjustmant)
2. MTT-5512 (or equivalent)
3. MTT-113CN (or equivalent) : Test tape on which 8KHz signal is recorded (Azimuth)
4. MTT-112B (or equivalent) : Test tape on which 1KHz signal is recorded (L.R. channel unbalance)

4-2-2 Location of Adjustment Points (Refer to page 4-1)

4-2-3 Adjustment Procedure

4-2-3(a) TAPE SPEED

Item	Connection	Preparation	Adjustment Point	Remark
Tape speed (normal speed) adjustment	Figure 4-4	1) Insert MTT-111 to Deck 2. 2)Press PLAY button.	CVR1	3 KHz
Tape speed (high speed)	Figure 4-4	1) Insert MTT-111 to Deck 2. 2) Insert MTT-5512 to Deck1. 3) Press Hi-SPEED button. 4) Press RECORD button.	—	5200Hz ~ 6600Hz

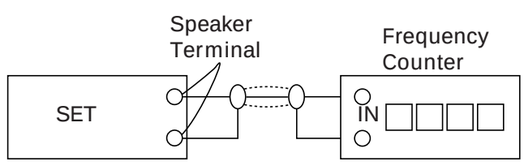


Figure 4-4

4-2-3(b) AZIMUTH

1. DECK 1

Item	Connection	Preparation	Adjustment Point	Remark
AZIMUTH	Figure 4-5	Play MTT113N in the DECK1.	Figure 4-6	Maximum output and identical phase of L,R channel. Set the screw after adjustment.
L,R unbalance	—	Play MTT112B in the DECK1.	JSVR15L	L-CH → R-CH ±0.5dB

2. DECK 2

Item	Connection	Preparation	Adjustment Point	Remark
AZIMUTH	Figure 4-5	Play MTT113N in the DECK2.	Figure 4-6	Maximum output and identical phase of L,R channel. Set the screw after adjustment.

3. Recording Frequency

Item	Connection	Preparation	Adjustment Point	Remark
Bias oscillation frequency	JPT1	Record MTT5512 in the DECK1.	LL1	85KHz

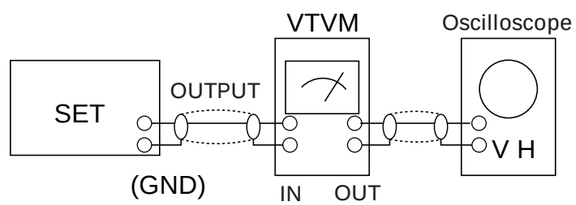


Figure 4-5

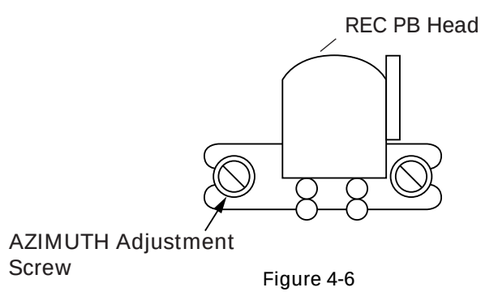
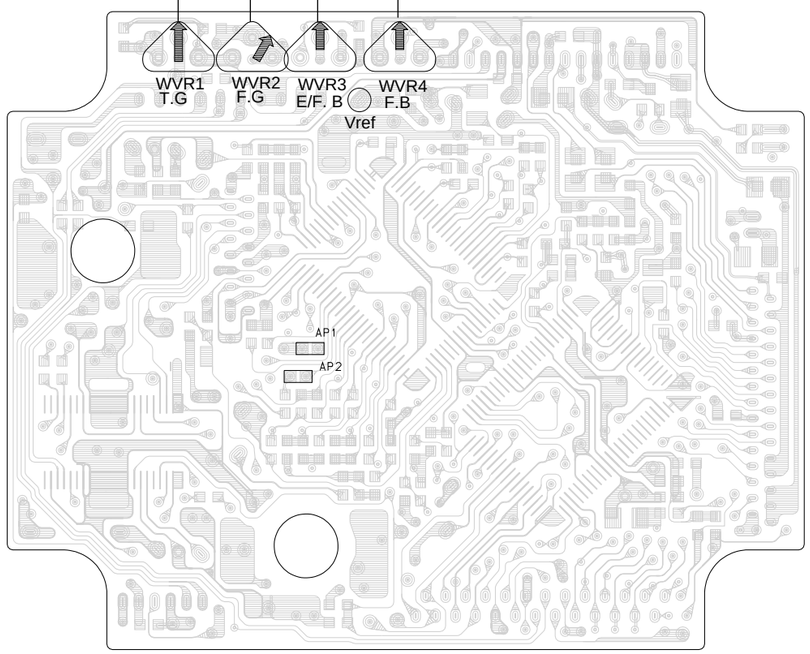


Figure 4-6

4-3 CD



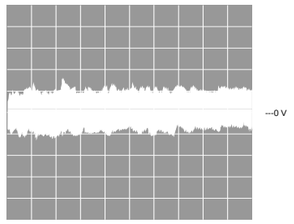
4-3-1 To Adjust FOCUS BIAS(STOP mode)

1. Set Volt/Div of the oscilloscope to DC 100mV.
2. Ground the scope input and set the waveform to 0V, DC range.
3. Connect the GND terminal of the oscilloscope to Vref, and (+) terminal to center of AP1.
4. Set WVR4 to 0mV.

4-3-2 To Adjust Tracking Gain (PLAY mode)

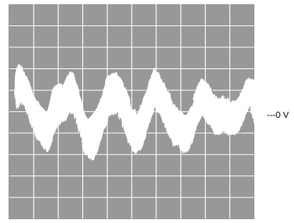
1. Connect the GND terminal of the oscilloscope to Vref and (+) terminal to AP2.
2. Load and play the disc
3. While the disc is running adjust the gain with WVR1 as shown below.

Normal frequency



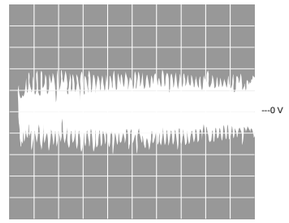
VOLT/DIV : 0.2V
TIME/DIV : 2mS

Low frequency



VOLT/DIV : 0.2V
TIME/DIV : 2mS

High frequency

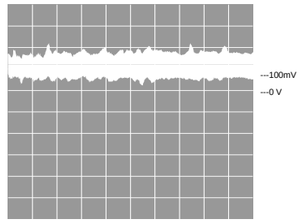


VOLT/DIV : 0.2V
TIME/DIV : 2mS

4-3-3 To Adjust Focus Gain (PLAY mode)

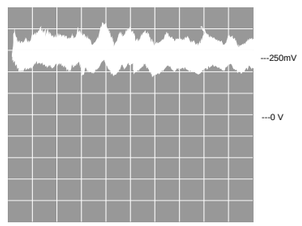
1. Connect the GND terminal of the oscilloscope to Vref and (+) terminal to AP1.
2. Load and play the disc
3. While the disc is running adjust the gain with WVR2 as shown in the following figure.

Normal frequency



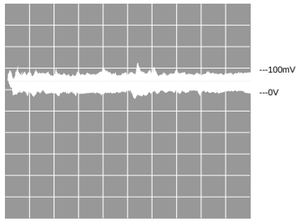
VOLT/DIV : 0.1V
TIME/DIV : 2mS

Low frequency



VOLT/DIV : 0.1V
TIME/DIV : 2mS

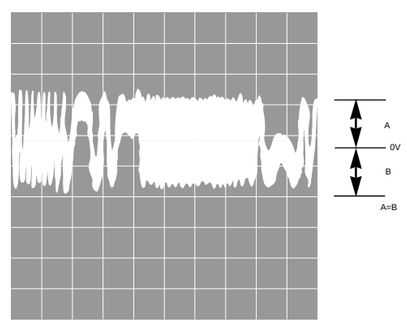
High frequency



VOLT/DIV : 0.1V
TIME/DIV : 2mS

4-3-4 To Adjust E/F Balance (PLAY mode)

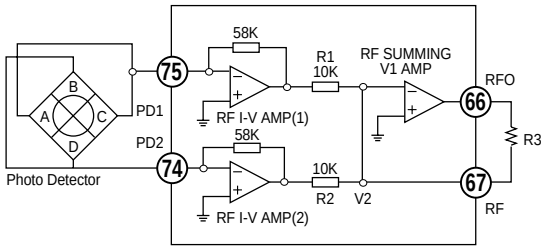
1. Set TIME/DIV of the oscilloscope to 2mS.
2. Set Volt/DIV of the oscilloscope to 0.5V.
3. Ground the scope input and set to DC and then set the DC range.
4. Connect the GND terminal of the oscilloscope to Vref and (+) terminal to center to AP2.
5. Load and play the disc.
6. Turn WVR1 counterclockwise to the minimum value.
7. Raise WVR3 and adjust the waveform so that its middle comes to GND of the oscilloscope (or until the upper half of waveform becomes symmetrical to the bottom half, A=B)
8. Adjust WVR1 (arrow) for normal sound.



5. Special Circuit Descriptions

5-1 CD

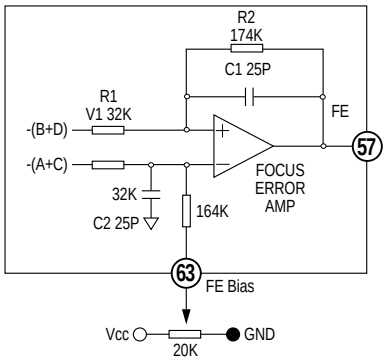
5-1-1 RF Amp (KA9220) : NIC9220



RF I-V Amp(1) and RF I-V Amp(2) currents are converted to voltage via internal resistance of 58kΩ from the current of PD1(A+C) and PD2(B+D): These voltage are added by the RF summing amplifier.
The signal (A+B+C+D) is applied to RFO (No. 2 terminal).
RF output voltage is calculated as follows :

$$V_{RF} = -R3 \times (iPD1 + iPD2)$$
$$= -R3 \times (V_1/R_1 + V_2/R_2)$$
$$= -R3 \times \left(\frac{V_1}{10K} + \frac{V_2}{10K}\right)$$
$$= -\frac{R3}{10K} \times (V_1 + V_2)$$

5-1-2 FOCUS ERROR Amp(KA9220) : NIC9220



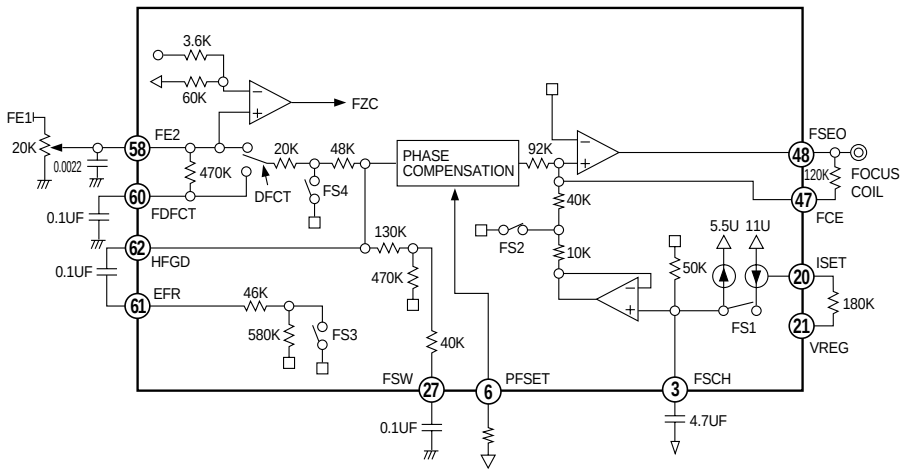
FOCUS ERROR Amp amplifies the difference between RF I-V Amp(1) output (A+C) and RF I-V Amp(2) output(B+D).
These two signals are supplied to (-) and (+) input terminals of FOCUS ERROR Amp. The FOCUS ERROR output is applied to FE (Terminal No.57).
The FE output voltage of this low frequency component varies according to {(A+C) - (B+D)}.
VFE is calculated as follows :

$V_{FE} = (R2/R1) \times (V2-V1) = 5.4(V2-V1)$

This FOCUS ERROR voltage is sent to FOCUS SERVO .

5-1-3 FOCUS SERVO SYSTEM (KA9220) : NIC9220

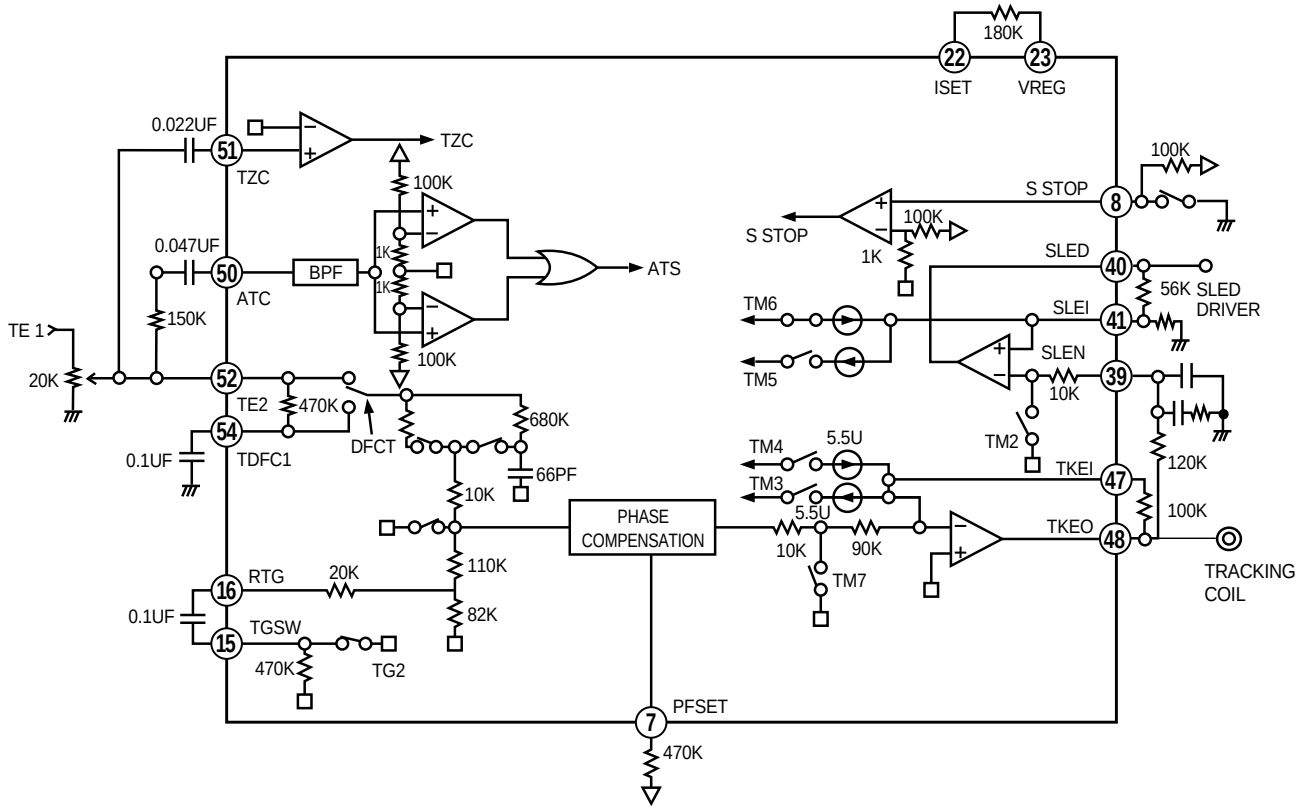
When FS3 is ON, high frequency gain decreases (time constant set by pin17, pin19 ; capacitor is connected to internal resistance).
The capacitor between pin 18 and GND sets the time constant to pass the low frequencies in PLAY mode.



The maximum frequency of the focus phase compensation is inversely proportional to the resistance connected to pin 7. Focus search peak is about 1.1 Vp-p, and is inversely proportional to the resistance connected to pins 22,23 (if this resistance changes, the peak of track jump and sled kick change).
The inverted input of FZC comparator is set to 5.7% of the difference between Vcc and VC(pin69) {{5.7% x (Vcc-Vc)}.
Note : If the resistance connected to pin7 changes, the phase compensation peak of the focus tracking sled servos change. (The 'op-amp' dynamic range and offset voltage also change.)

5-1-4 TRACKING SLED SERVO SYSTEM (KA9220) : NIC9220

The capacitor between pin 15 and 16 attenuates high frequencies when TG2 is off. The maximum frequency of tracking phase compensation is inversely proportional to the resistance connected to pin 7 (about 1.2kHz at 470k). The tracking jump (FWD and REV) is determined when TM3 and TM4 are ON, and the peak voltage induced from the tracking coil is determined by both TM3 and TM4 currents and the feed back resistance of pin 47.
Track jump max voltage = TM3 (TM4) current x feedback resistance.



FWD or REV sled kick occurs when TM5 or TM6 is ON, and the peak voltage added to sled motor (determined by TM5 or TM6 current and the feedback resistance of pin 41.)
Sled jump max. voltage = TM5(TM6) current x feedback resistance
Each SW current is determined by the resistance connected to pin 22 and 23.
When the resistance is about 150Ω,

TM3 or TM4 = 11μA,

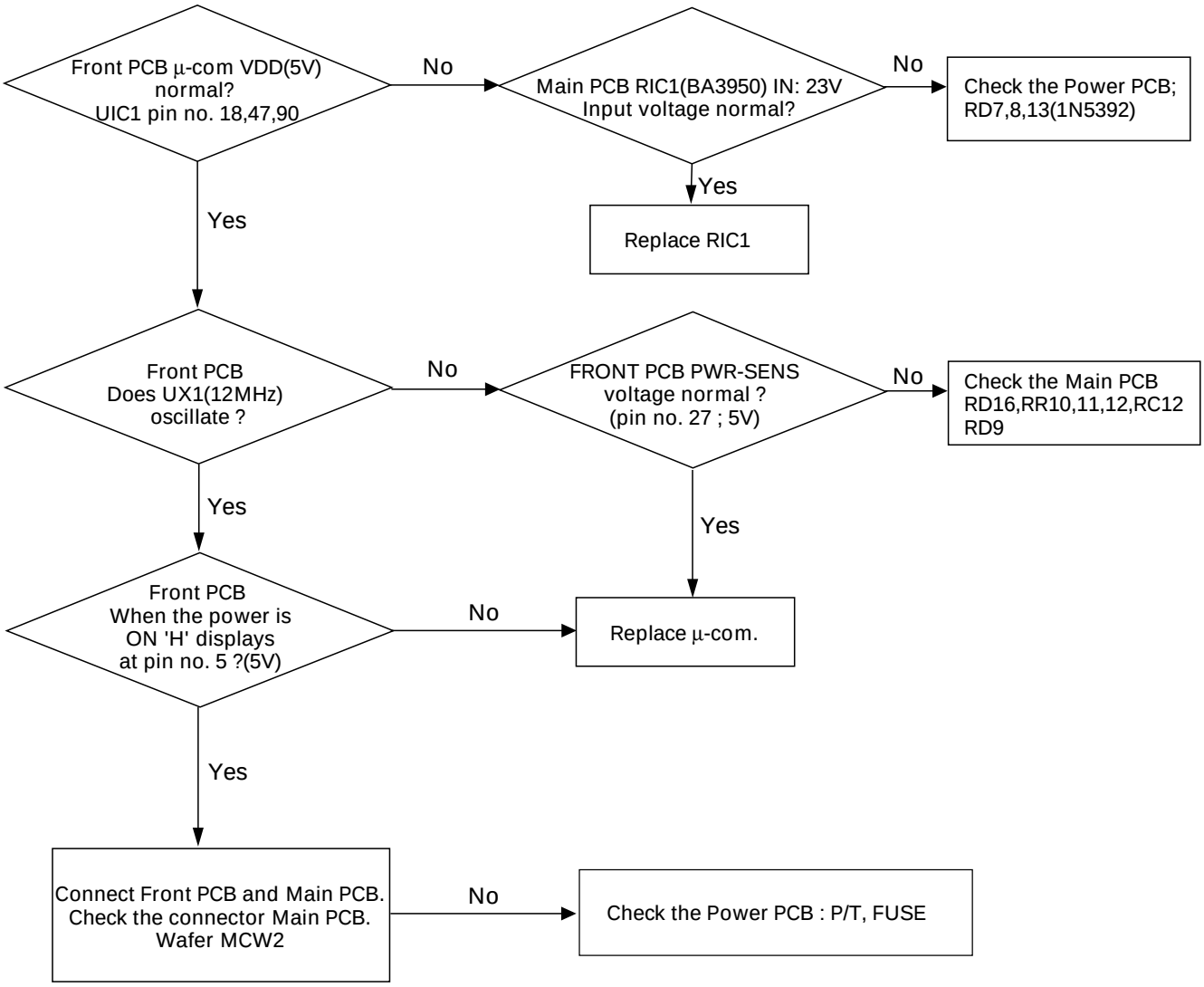
TM5 or TM6 = 22μA,

This current is inversely proportional to the resistor, variable within a range of t 5 to 40 μA for TM3.
STOP is the ON/OFF detection signal for the limit SW (or the sled motor's innermost cirumference).

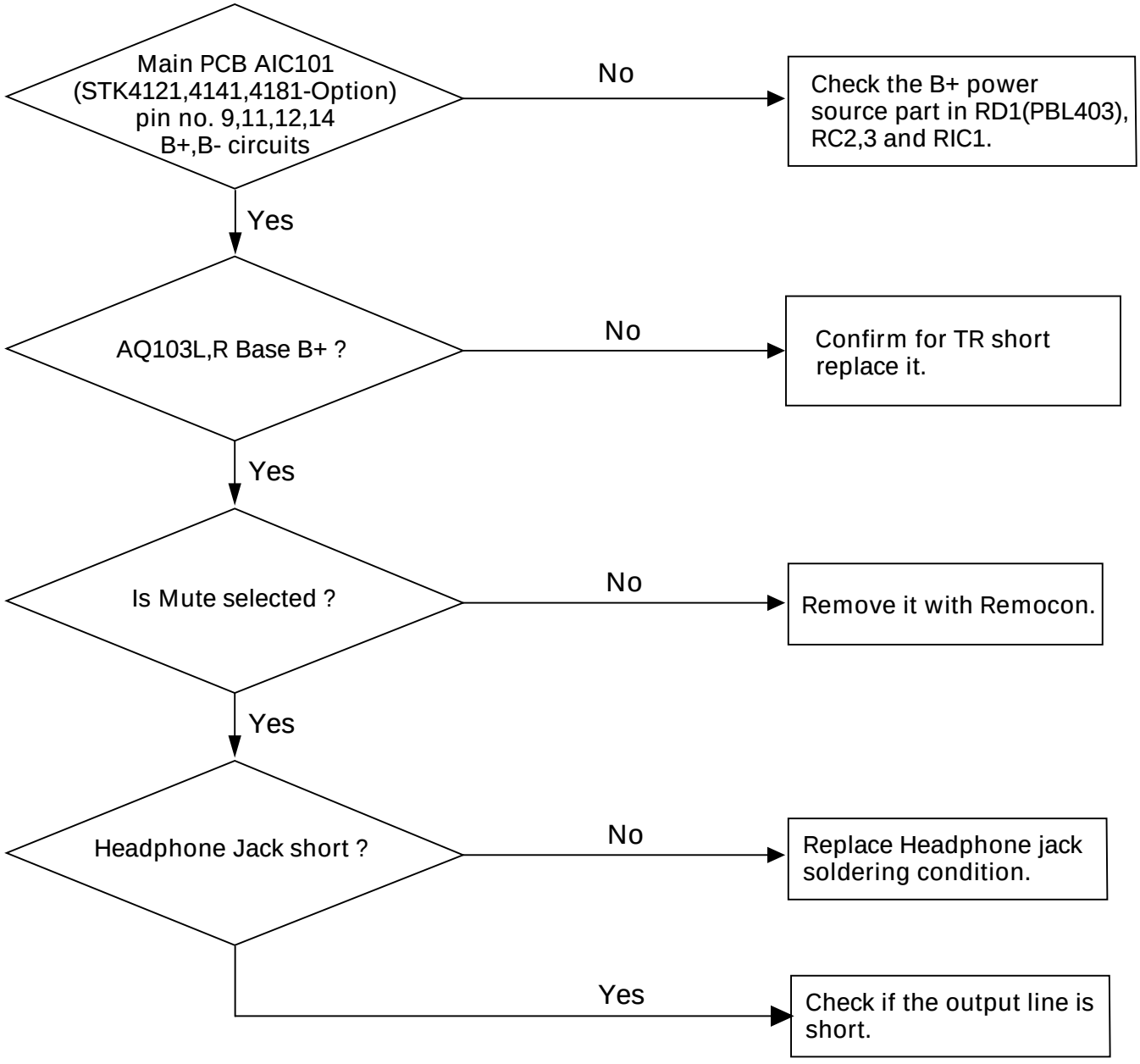
6. Troubleshooting

6-1 Amplifier

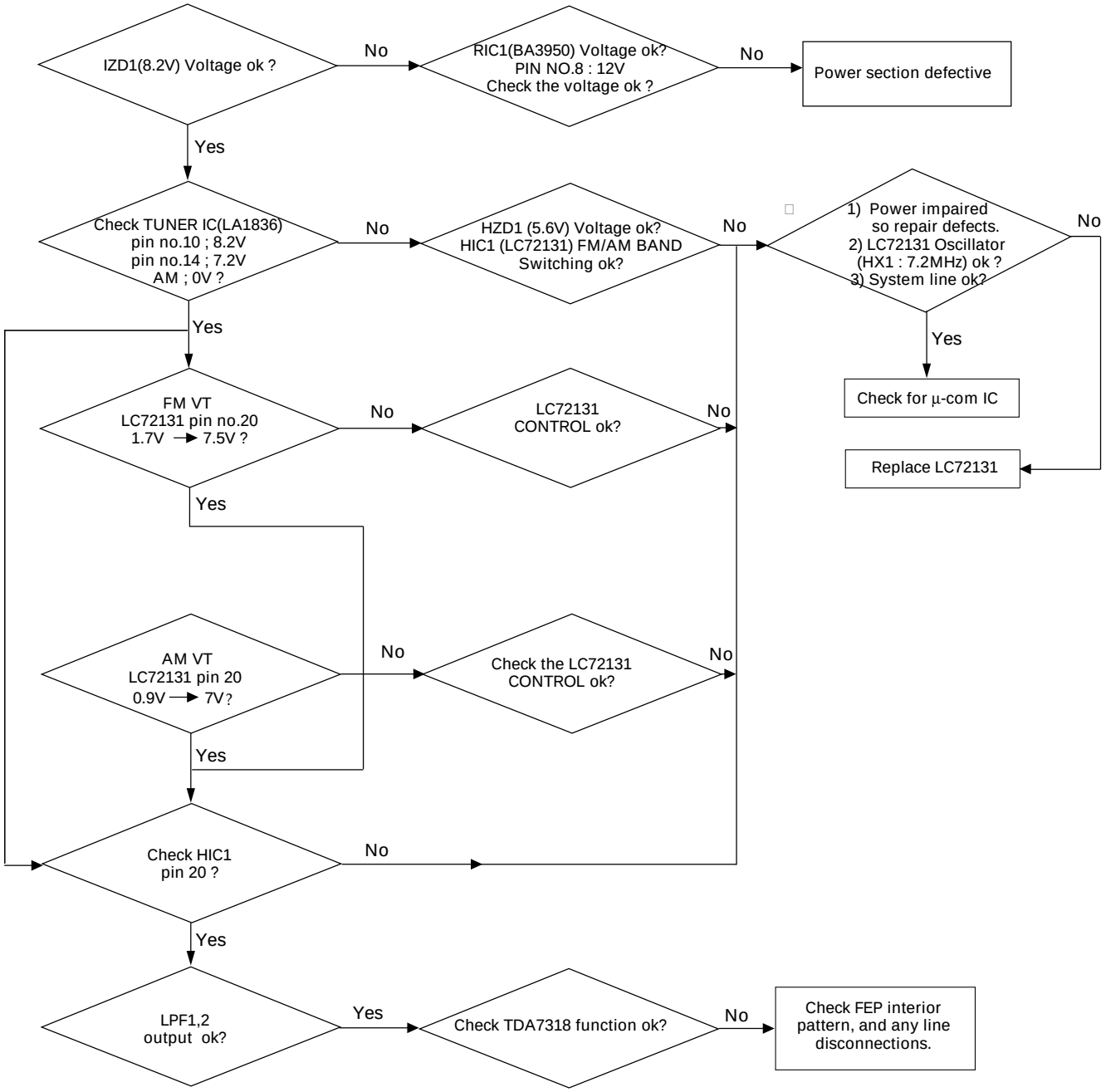
6-1-1 Power Malfunction


Front PCB µ-com VDD(5V) normal? UIC1 pin no. 18,47,90
No
Main PCB RIC1(BA3950) IN: 23V Input voltage normal?
No
Check the Power PCB; RD7,8,13(1N5392)
Yes
Replace RIC1
Yes
Front PCB Does UX1(12MHz) oscillate ?
No
FRONT PCB PWR-SENS voltage normal ? (pin no. 27 ; 5V)
No
Check the Main PCB RD16,RR10,11,12,RC12 RD9
Yes
Yes
Front PCB When the power is ON 'H' displays at pin no. 5 ?(5V)
No
Replace µ-com.
Yes
Connect Front PCB and Main PCB. Check the connector Main PCB. Wafer MCW2
No
Check the Power PCB : P/T, FUSE

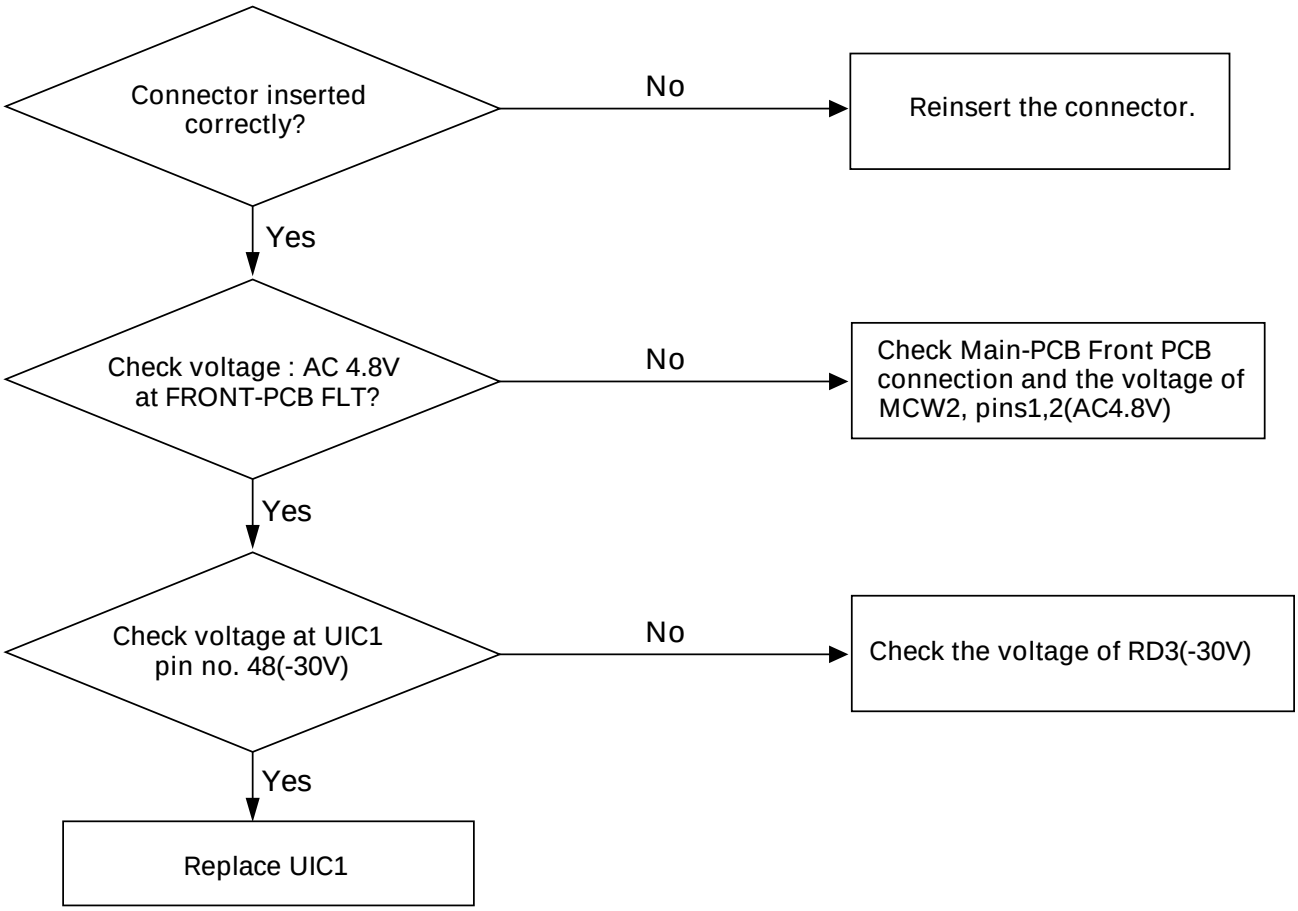
6-1-2 No Output



6-1-3 Tuner Malfunction (FM/AM)



6-1-4 V.F.D Malfunction

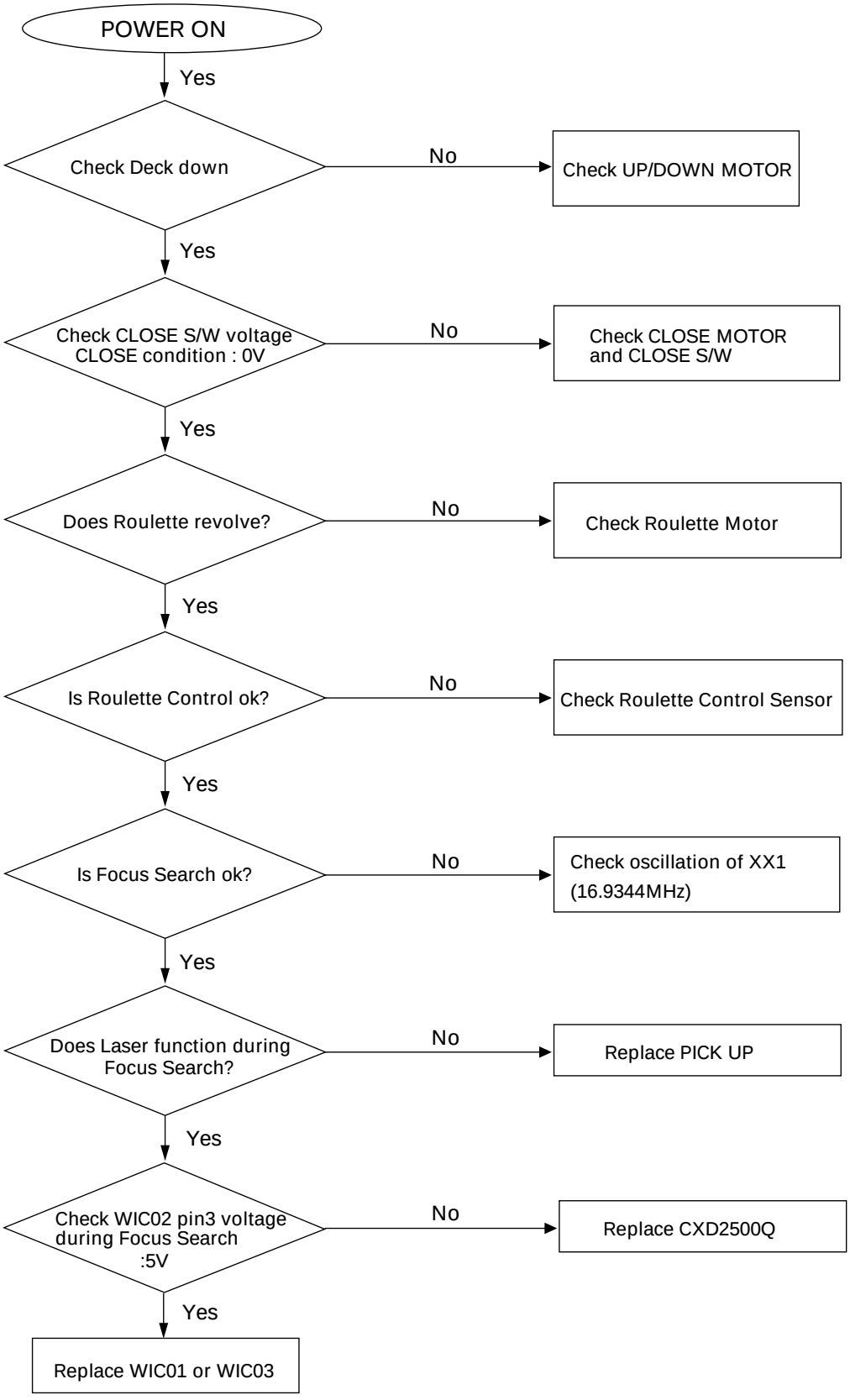


6-2 Cassette Deck

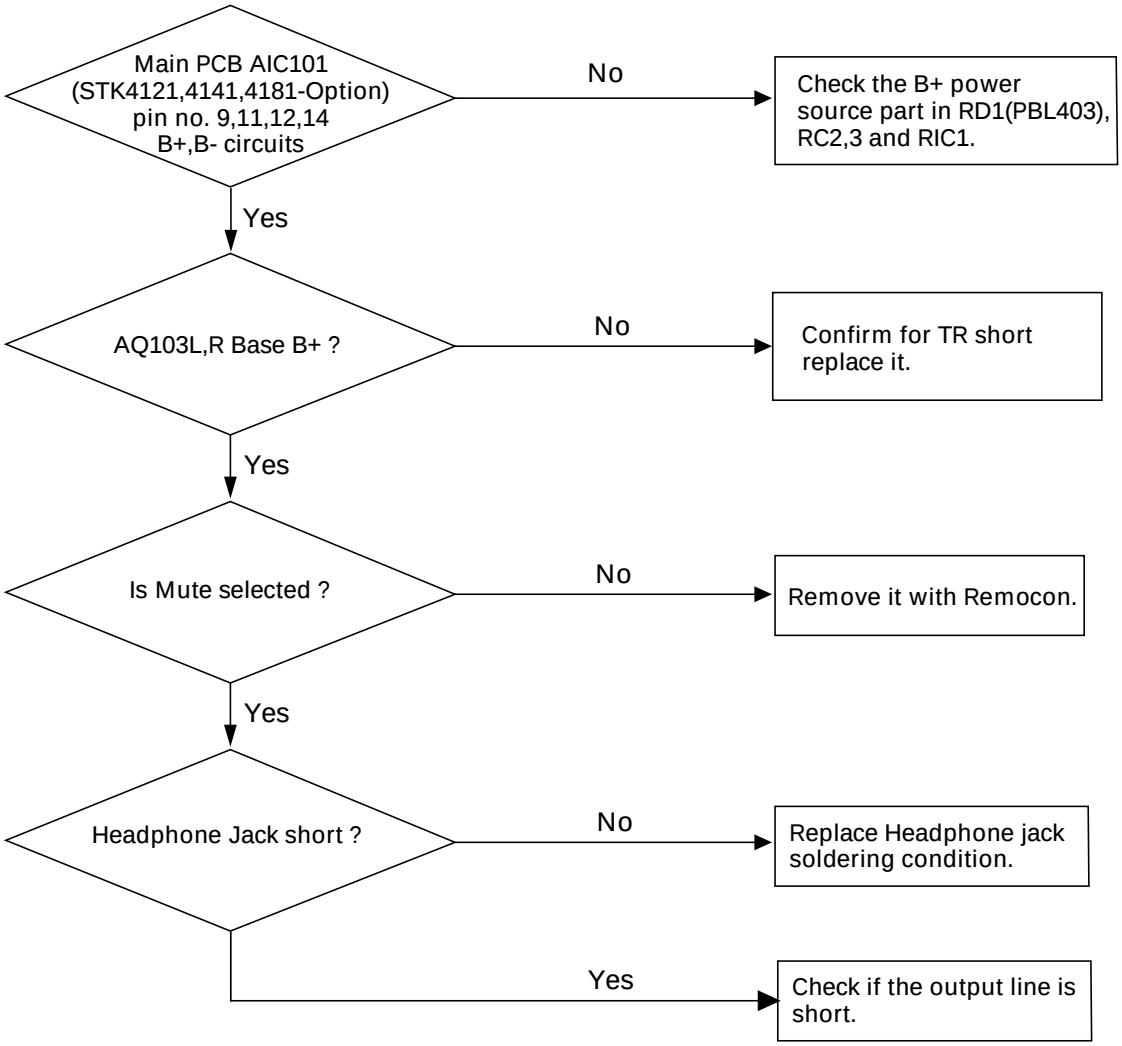
<table>
<tr><th>Block</th><th>Main Function</th><th>Check Point</th></tr>
<tr><td>TAPE IC JIC1
(KA22291)</td><td>Convert of P/B & R/P Signal</td><td>Check for voltage at pin5
1 P/B Deck : H
2 R/P Deck : L</td></tr>
<tr><td>BIAS OSC</td><td>Oscillate RECORD BIAS (85KHZ)</td><td>Check for voltage at LC2
Osc Frequency : 85kHz
When inoperative : LQ4, LQ3 check</td></tr>
<tr><td>R/P Switching</td><td>Convert of PLAY/RECORD</td><td>Check for voltage at pin no.16,8
<table><tr><th>Mode</th><th>Pin no.16,8</th></tr><tr><td>Rec.
PLAY</td><td>9V
0V</td></tr></table></td></tr>
</table>

6-3 CD

6-3-1 Disc Revolution Malfunction

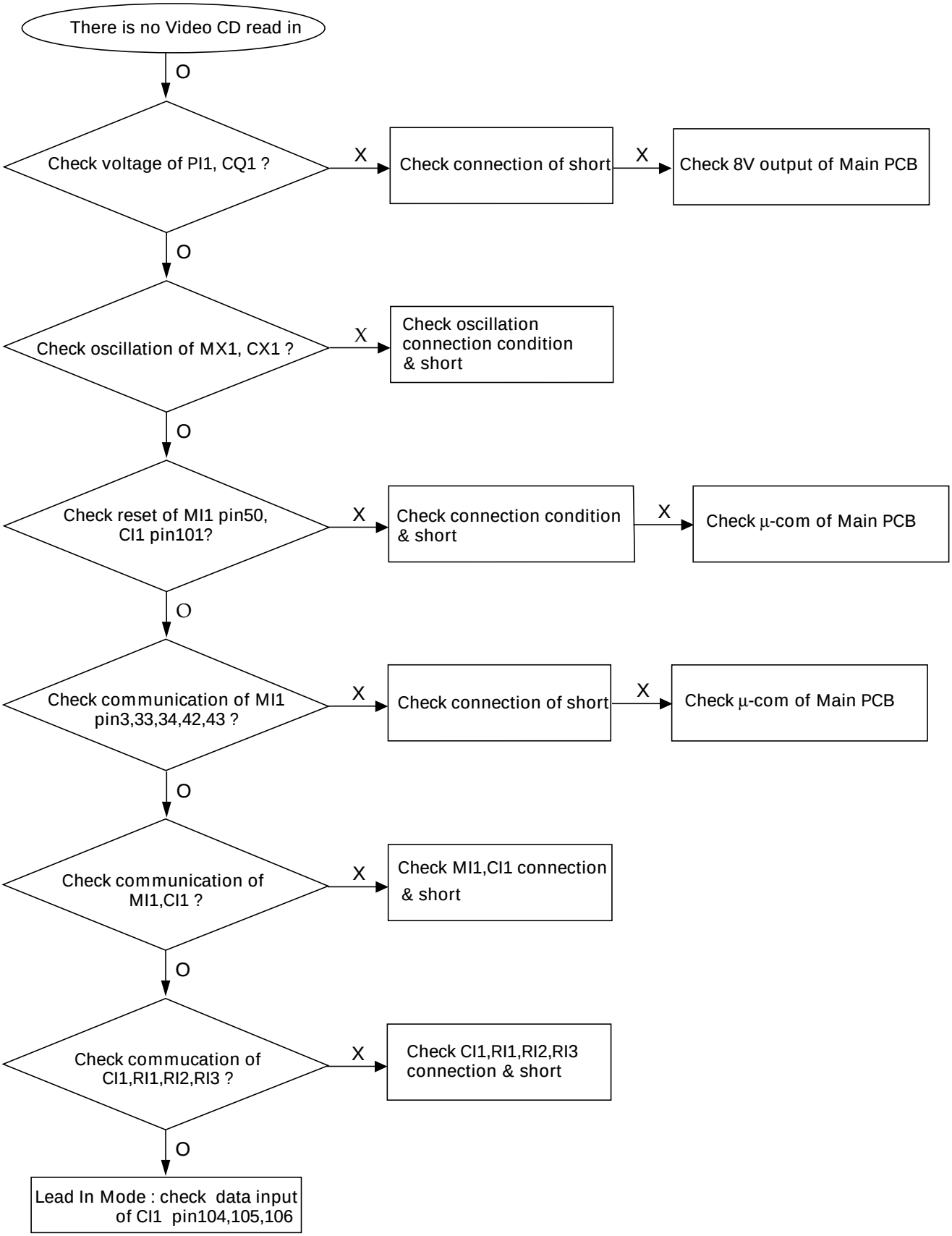


6-3-2 Audio Output Malfunction

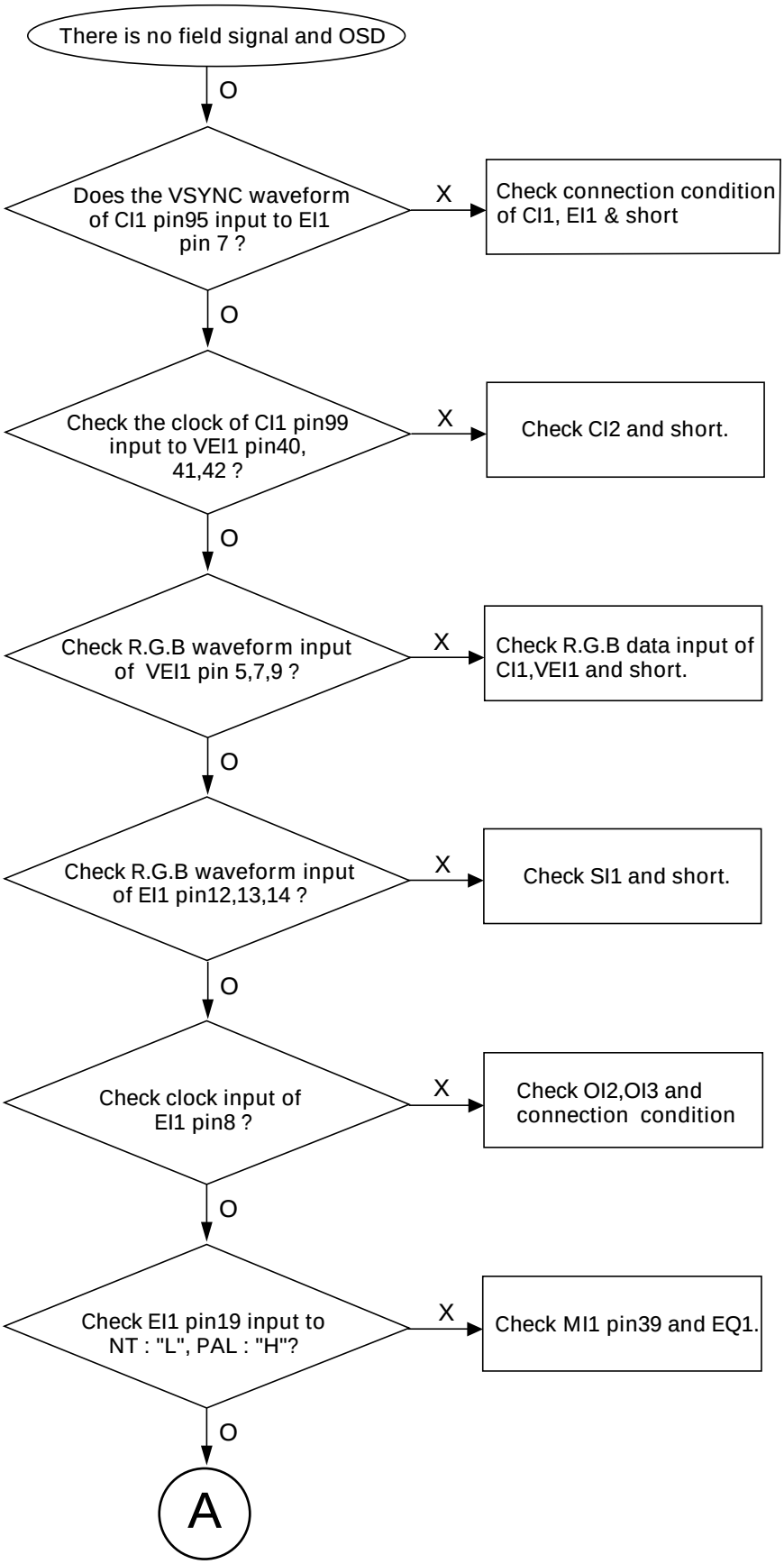


6-4 Video CD

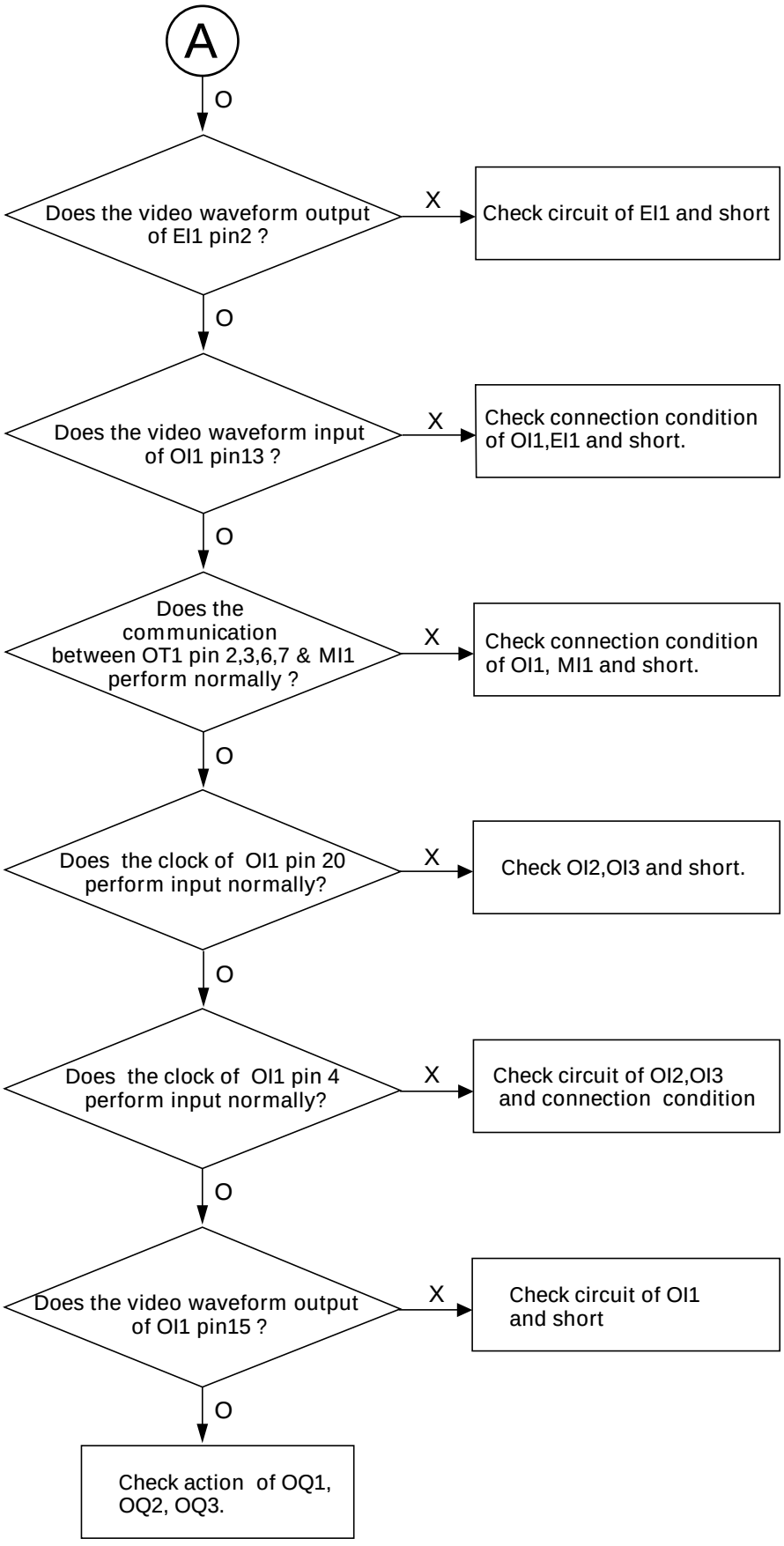
6-4-1 Load In Malfunction



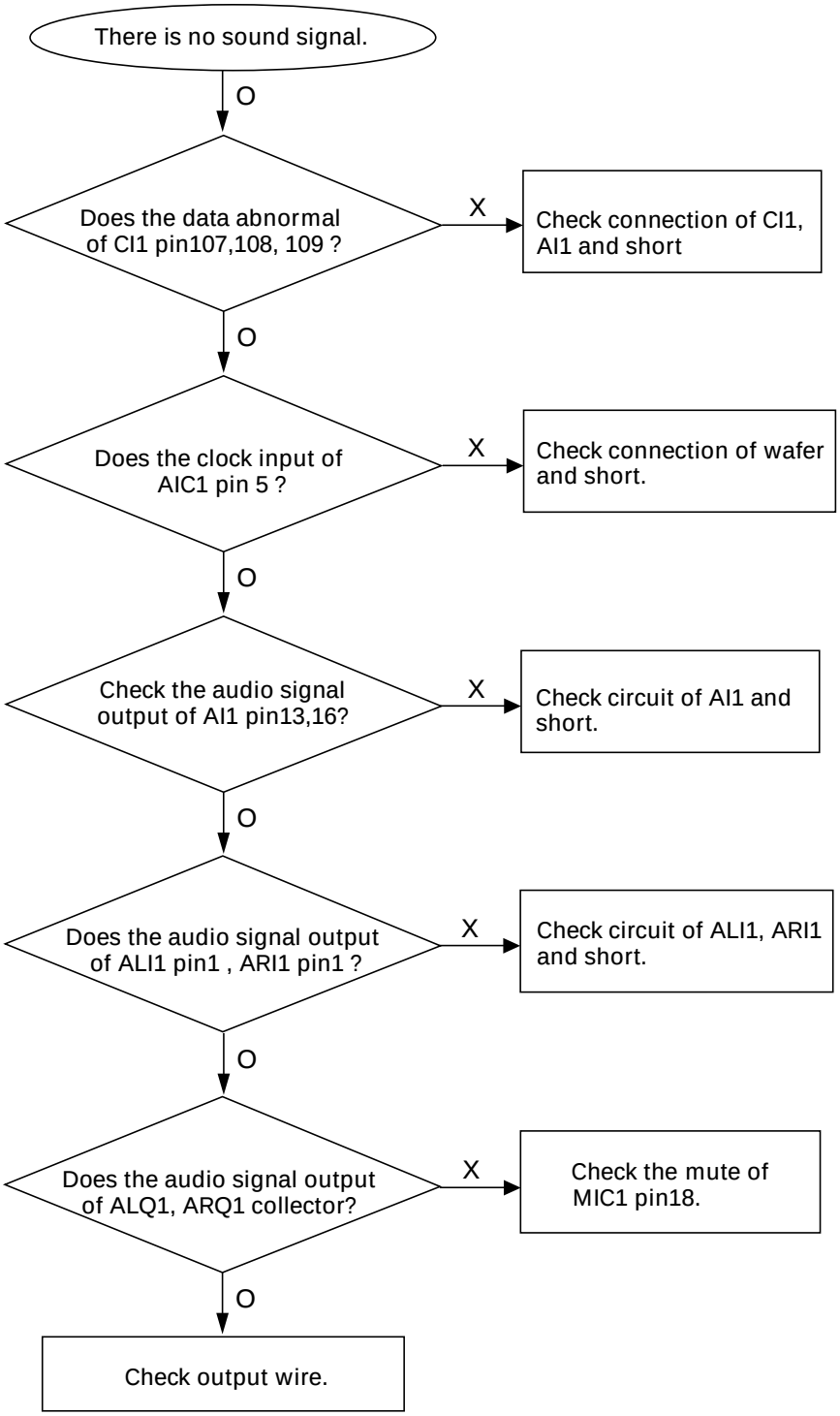
6-4-2 No Filed Signal and OSD


There is no field signal and OSD
O
Does the VSYNC waveform of CI1 pin95 input to EI1 pin 7 ?
X
Check connection condition of CI1, EI1 & short
O
Check the clock of CI1 pin99 input to VEI1 pin40, 41,42 ?
X
Check CI2 and short.
O
Check R.G.B waveform input of VEI1 pin 5,7,9 ?
X
Check R.G.B data input of CI1,VEI1 and short.
O
Check R.G.B waveform input of EI1 pin12,13,14 ?
X
Check SI1 and short.
O
Check clock input of EI1 pin8 ?
X
Check OI2,OI3 and connection condition
O
Check EI1 pin19 input to NT : "L", PAL : "H"?
X
Check MI1 pin39 and EQ1.
O
A

6-4-3 No Field Signal and OSD(Continued)

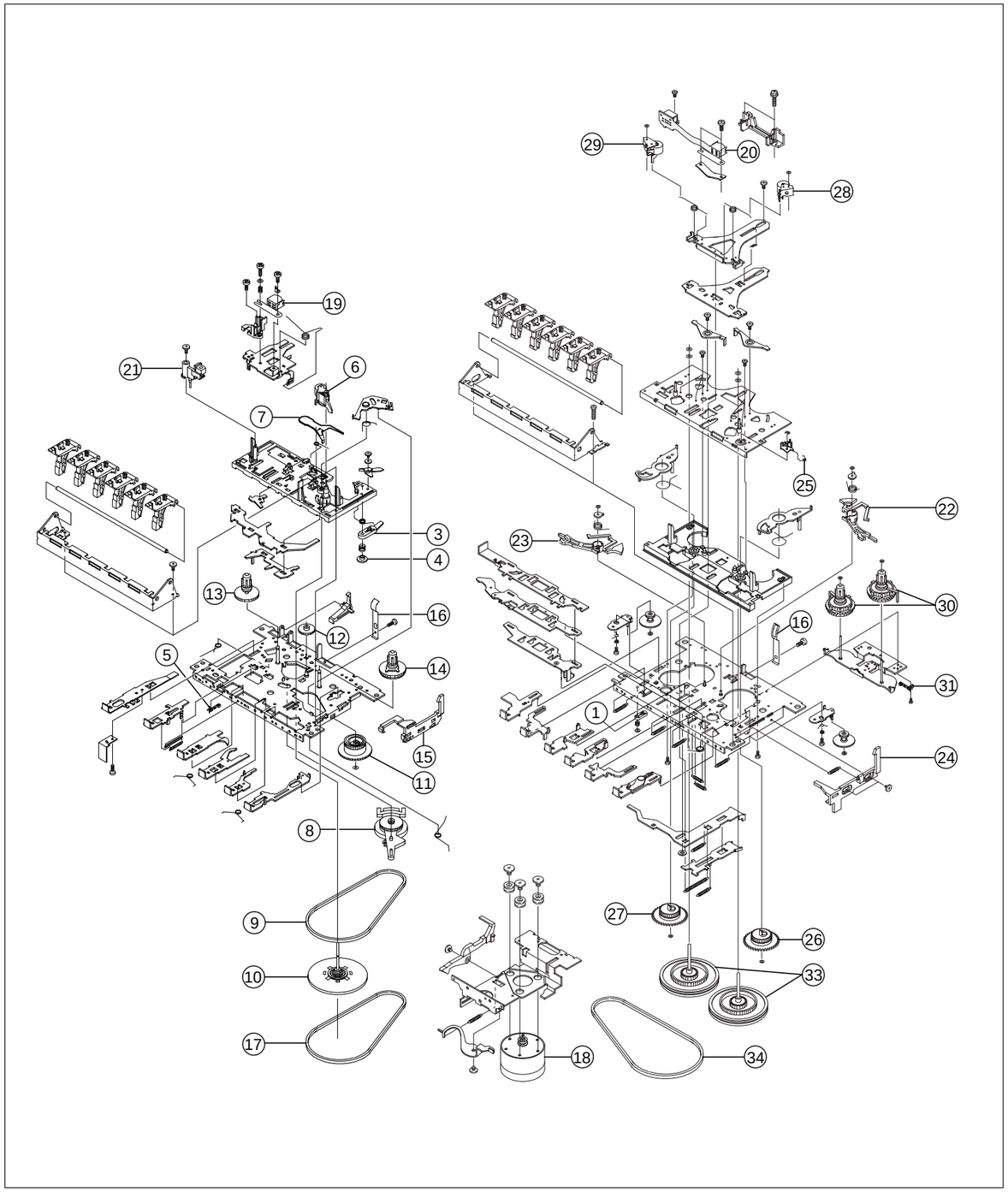

A
O
Does the video waveform output of EI1 pin2 ?
X
Check circuit of EI1 and short
O
Does the video waveform input of OI1 pin13 ?
X
Check connection condition of OI1,EI1 and short.
O
Does the communication between OT1 pin 2,3,6,7 & MI1 perform normally ?
X
Check connection condition of OI1, MI1 and short.
O
Does the clock of OI1 pin 20 perform input normally?
X
Check OI2,OI3 and short.
O
Does the clock of OI1 pin 4 perform input normally?
X
Check circuit of OI2,OI3 and connection condition
O
Does the video waveform output of OI1 pin15 ?
X
Check circuit of OI1 and short
O
Check action of OQ1, OQ2, OQ3.

6-4-4 No Sound Signal


There is no sound signal.
O
Does the data abnormal of CI1 pin107,108, 109 ?
X
Check connection of CI1, AI1 and short
O
Does the clock input of AIC1 pin 5 ?
X
Check connection of wafer and short.
O
Check the audio signal output of AI1 pin13,16?
X
Check circuit of AI1 and short.
O
Does the audio signal output of ALI1 pin1 , ARI1 pin1 ?
X
Check circuit of ALI1, ARI1 and short.
O
Does the audio signal output of ALQ1, ARQ1 collector?
X
Check the mute of MIC1 pin18.
O
Check output wire.

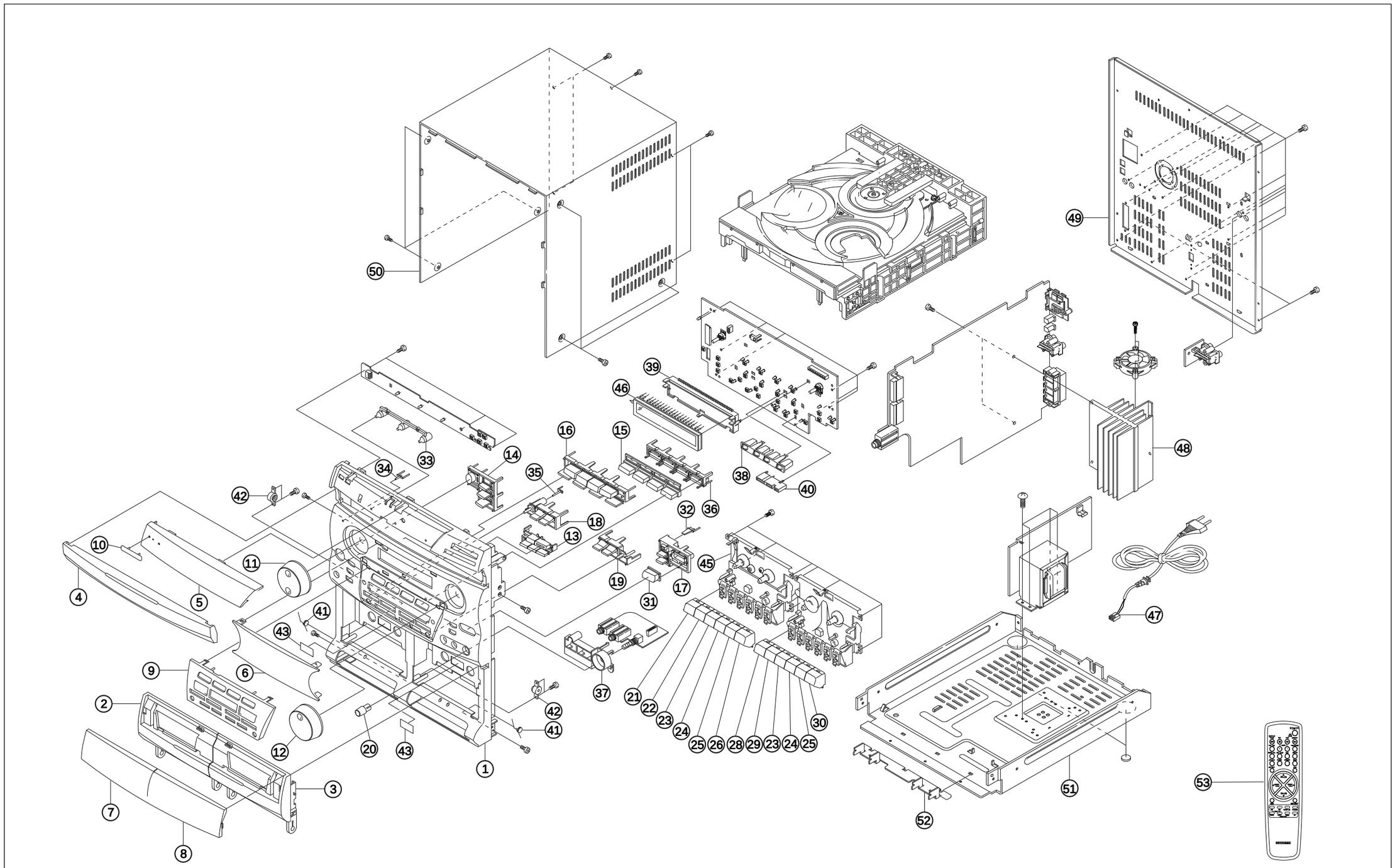
7. Exploded Views and Parts List

7-1 Cassette Deck View and Parts List



No.	New Code No.	Description	Specification	Old Code No.
	AH59-20002C	TAPE DECK ASS'Y	TN521ZSW-290Z/332	14929-123-140
1	AH81-10001V	PAUSE LEVER	1821-01-15	10000-186-111
3	AH81-10005U	PAUSE LEVER	1821-14-55	10000-268-011
4	AH81-10005V	PAUSE STOPPER	1921-14-11	10000-268-013
5	AH81-10005W	LEAF SWITCH	MSW-1541T	10000-268-023
6	AH81-10005Z	PINCH ROLLER ARM ASS'Y	1921-04-301	10000-268-035
7	AH81-10006K	SENSOR	1921-05-06	10000-268-053
8	AH81-10006B	RF CLUCH ASS'Y	1921-07-302	10000-268-039
9	AH81-10006C	RF BELT	1921-07-03	10000-268-040
10	AH81-10006E	FLYWHEEL ASS'Y	1921-09-303	10000-268-044
11	AH81-10006F	CAM GEAR	1921-26-02	10000-268-047
12	AH81-10006G	FF GEAR	1821-10-07	10000-268-049
13	AH81-10006H	SUPPLY REEL ASS'Y	1921-05-304	10000-268-051
14	AH81-10006J	TAKE UP REEL ASS'Y	1921-05-303	10000-268-052
15	AH81-10006M	EJECT SLIDE LEVER	1921-13-02	10000-268-062
16	AH81-10006N	PACK SPRING	1821-10-93	10000-268-064
17	AH81-10006R	MAIN BELT	1821-12-173	10000-268-159
18	AH81-10021T	MOTOR	EG530YD2B	10000-502-020
19	AH81-10022E	R/P HEAD	MS15R-AA2N1	10000-523-008
20	AH81-10022H	PB HEAD	MR359-KF243	10000-524-021
21	AH81-10022T	E-HEAD	PHK380-MS16A	10000-542-002
22	AH81-10023J	AUTO LEVER(F)	1851-20-01	10000-601-005
23	AH81-10023K	AUTO LEVER(R)	1851-20-02	10000-601-008
24	AH81-10023L	EJECT SLIDE LEVER	1851-17-03	10000-601-010
25	AH81-10023M	TURN OVER SPRING	1851-03-02	10000-601-015
26	AH81-10023N	GEAR-T CAM(F)	1851-05-03 A/S	10000-601-019
27	AH81-10023P	T-CAM GEAR(R)	1851-06-02	10000-601-022
28	AH81-10023Q	PINCH ROLLER(F)	1851-09-501	10000-601-054
29	AH81-10023R	PINCH ROLLER(R)	1851-10-501	10000-601-055
30	AH81-10023S	REEL ASS'Y	1851-11-501	10000-601-057
31	AH81-10023T	LEAF SW	MSW1290CV	10000-601-058
33	AH81-10023W	FLY WHEEL ASS'Y	1851-12-501	10000-601-065
34	AH81-10023W	MAIN BELT	1821-17-03	10000-601-066

7-2 Main Exploded View and Parts List



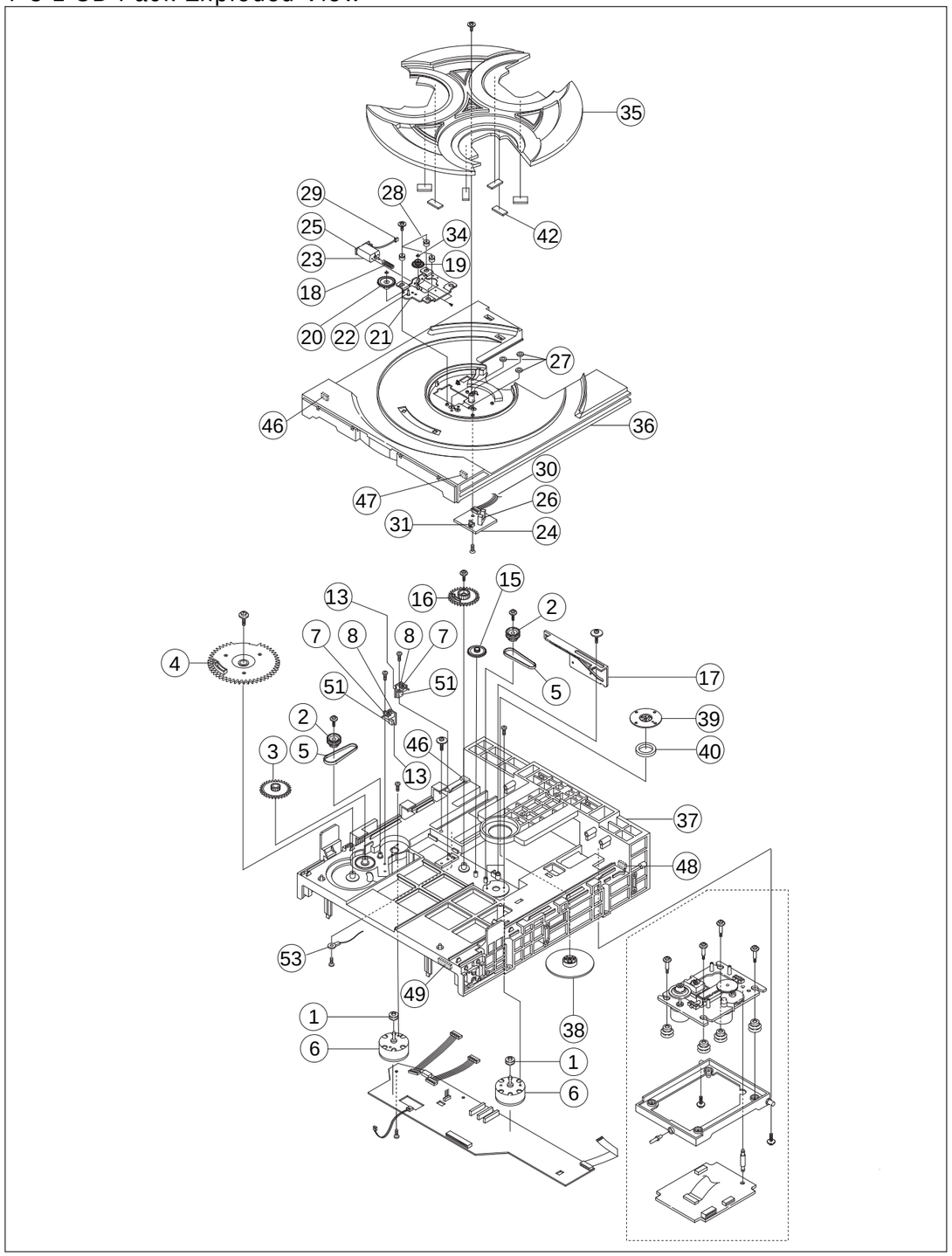
7-2-1 Main Parts List

No.	New Code No.	Description	Specification	Old Code No.
1	AH64-30108C	CABINET-FRONT	-,MIPS,94HB,T2.5,W270	
2	AH64-50101B	DOOR -CASSETTE.L	-,ABS,94HB,T3	
3	AH64-50102B	DOOR-CASSETTE.R	-,ABS,94HB,T3	
4	AH64-50305C	DOOR-TRAY	-,ABS,94HB,-,-,BLK	
5	AH64-40351E	WINDOW-CD	-,PMMA,-,-,VIOLET	
6	AH64-40134B	WINDOW-FLT	-,PMMA,94HB,T2,VIOLET	
7	AH64-40135B	WINDOW-DOOR,L	-,PMMA,94HB,T1.5	
8	AH64-40136B	WINDOW-DOOR,R	-,PMMA,94HB,T1.5	
9	AH63-30042C	COVER-FUNCTION.B	-,ABS,94HB,T3	
10	AH64-70003B	BADGE-BRAND	-,AL,-,L30,WHT,NEW	
11	AH64-10645A	KNOB-JOG	ABS,94HB,BLK,-	
12	AH64-10644A	KNOB-VOLUME	ABS,94HB,BLK,-	
13	AH64-11003A	KNOB-OPEN/CLOSE	ABS,94HB,BLK,	
14	AH64-10412B	KNOB-POWER	ABS,94HB,BLK,	
15	AH64-10411C	KNOB-FUNCTION	-,PMMA,94HB,MILKY	
16	AH64-10084A	KNOB-CD	ABS+PMMA,-,BLK	14082-0866-00
17	AH64-10413A	KNOB-SBS	ABS,94HB,BLK	14083-0869-00
18	AH64-10414A	KNOB-ECHO	ABS,94HB,BLK	14083-0870-00
19	AH64-10415A	KNOB-CONTROL	ABS,94HB,BLK	14083-0871-00
20	AH64-10646A	KNOB-MIC	ABS,94HB,BLK	14083-0705-01
21	AH64-10336C	KNOB-DECK,REC	ABS,94HB,BLK	14083-0705-02
22	AH64-10337B	KNOB-DECK,PLAY.A	ABS,94HB,BLK	14083-0706-01
23	AH64-10335C	KNOB-DECK,REW	ABS,94HB,BLK	14083-0704-02
24	AH64-10333B	KNOB-DECK,FF	ABS,94HB,BLK	14083-0699-01
25	AH64-10334B	KNOB-DECK,ST/EJ	ABS,94HB,BLK	14083-0700-01
26	AH64-10338C	KNOB-DECK,PAUSE	ABS,94HB,BLK	14083-0707-02
27	AH64-10339B	KNOB-DECK,PLAY.L	ABS,94HB,BLK	14083-0708-01
28	AH64-10336B	KNOB-MODE	ABS,94HB,BLK	14083-0705-01
29	AH64-10335B	KNOB-DECK	ABS,94HB,BLK,PLAY S	14083-0704-01
30	AH64-10338B	KNOB-DIRECT	ABS,94HB,BLK	14083-0707-01
31	AH67-10081D	LENS-SRS	-,-,PMMA,T6.5	
32	AH67-10083A	LENS-SBS	,PMMA,-,-,MILKY	
33	AH67-10103A	LENS-SKIP	-,-,PMMA,-,-,TRP+T102	
34	AH67-10132A	LENS-JOG	-,-,PMMA,-	
35	AH61-20411A	HOLDER-ECHO	ABS, 94HB,BLK	
36	AH61-20165A	HOLDER-FUNCTION	ABS,94HB,WHT,-	
37	AH61-20164A	HOLDER-JACK	ABS,94HB,BLK	
38	AH61-20244A	HOLDER-CONTROL	ABS,94HB,WHT,-	13324-0262-00
39	AH61-20080A	HOLDER-FLT	ABS,94HB,BLK	
41	AH61-60129B	SPRING-EJECT	,SUS,PI1.0	
42	AH61-80030A	DAMPER ASSY	-,POM,M0.8,G130,BLK	
43	AH68-50262B	LABEL-REFLECTOR	-,T/PAPER,T0.07,L20 W10	
44	AJ59-20002K	DECK-CDP	CMS-CR3P	*CMS-CR3P
45	AH59-20002C	DECK-CASSETTE	TN521ZSW-290Z/332, CASSETTE	14929-123-140
46	AH07-20045C	VF-DISPLAY	SVA-10SS06,-,104,14X25	
47	AH39-10002G	POWER-CORD	CP,VCTFK-0.75X2, 1.8M,5239	A6006-0179
48	AH62-30017A	HEAT-SINK	AL,-,-,-,-,-	11122-0073-00
49	AH64-30238D	CABINET-REAR	-,SECC,-,T0.8	
50	AH64-30351A	CABINET-TOP	-,PVC STEEL,-,T0.75	
51	AH64-30352A	CABINET-BOTTOM	-,SECCL,-,T1.0,-,-,-	
52	AH61-20421A	HOLDER-DECK	ABS BLK	
53	AH59-10080M	REMOCON	-,-,BU2478,26,MAX460V	

7-3 CD Pack Parts List

No.	New Code No.	Description	Specification	Old Code No.
	CMS-CR3P	DECK-CD ROULETTE-CHANGER	CMSCR3P	
1	AH66-10008A	PULLEY-MOTOR	POM (M90-02) BLK	11504-0008-00
2	AH66-20058A	GEAR-PULLEY	POM (M90-02) BLK	11474-0065-00
3	AH66-20059A	GEAR-TRAY(1)	POM (M90-02) WHT	11474-0066-00
4	AH66-20060A	GEAR-TRAY(2)	POM (M90-02) WHT	11474-0067-00
5	AH66-60003A	BELT-DISC	CR (NEOPLENCE)	11494-0004-00
6	AH66-10021A	MOTOR-DC	RF-500TB-12560	B3070-0002
7	3405-000129	SWITCH-MICRO	SSCF21	B3006-0048
8	AH41-10222A	PCB-SWITCH	XPC 1.6t 1VO	16024-0314-00
15	AH66-20061A	GEAR-UD(1)	POM (M90-02) BLK	11474-0068-00
16	AH66-20062A	GEAR-UD(2)	POM (M90-02) BLK	11474-0069-00
17	AH66-20063A	GEAR-CAM	ABS BLK	11474-0070-00
18	AH66-20064A	GEAR-WORM	POM (M90-02) WHT	11474-0071-00
19	AH66-20065A	GEAR-ROULETTE(1)	HYTREL 5526	11474-0072-00
20	AH66-20066A	GEAR-ROULETTE(2)	POM (M90-02) WHT	11474-0073-00
21	AH61-10282A	BRACKET-MOTOR	SECC 1.0t	13014-0209-00
22	AH61-50098A	SHAFT-MOTOR	SUS 303 D2.5 L9.3	11404-0106-00
23	AH31-10024A	MOTOR-DC	FF-130SH-14230	B3070-0113
24	AH41-10221A	PCB-SENSOR(R)	XPC 1.0t 1VO	16024-0313-00
25	AH41-10223A	PCB-MOTOR(R)	XPC 1.0t 1VO	16024-0315-00
26	AH32-10001E	SENSOR-ROULETTE	SG-207	16219-0003-00
27	AH69-20044A	CUSHION-MOTOR	IIR (Hs 40)	13054-0073-00
28	AH69-20051A	CUSHION-BRACKET	IIR (Hs 40)	13054-0081-00
29	AH81-10102K	CONNECTOR-WIRE(RM)	2P	1SHA1-002-509
30	AH81-10102M	CONNECTOR-WIRE(FL)	5P	1SHA1-002-511
31	3711-000906	CONNECTOR-WAFER	BOX 3P	13349-139-030
34	AH60-30017A	WASHER-POLY	ID2.0 OD5.0 T0.4 BLK	A0107-0036
35	AH66-90008A	TRAY-ROULETTE	ABS (XR-401)	13601-0011-00
36	AH66-90004A	TRAY-DISC	ABS (XR-401)	13600-0012-00
37	AH61-20003A	BASE-MAIN	ABS (HF-380)	12200-0124-00
38	AH66-90021A	TABLE-CHUCK UNION	ABS +GS 20%	12223-0015-00
39	AH61-10283A	BRACKET-CHUCK	SECC 0.8t	13014-0210-00
40	3302-000158	MAGNET-CHUCK	FERRITE 6	14014-500-600
42	AH69-20056A	CUSHION-ROULETTE	FELT 0.5t BLK	13054-0088-00
46	AH69-20060A	CUSHION-MAIN	E.V.A SPONGE Hs 15	13054-0097-00
47	AH69-20061A	CUSHION-TRAY(1)	E.V.A SPONGE Hs 25	13054-0098-00
48	AH69-20062A	CUSHION-TRAY(2)	E.V.A SPONGE Hs 25	13054-0099-00
49	AH68-50254B	LABEL-SERIAL	ART PAPER T0.1	18114-542-211
50	3711-000906	CONNECTOR-HEADER	BOX 3P1R 2MM	A6010-1671
51	A6010-1671	CONNECTOR-WAFER	BH250-04R WHT	13349-139-030
53	AH65-30010A	CLAMP-WIRE	DALB-2	16634-515-110

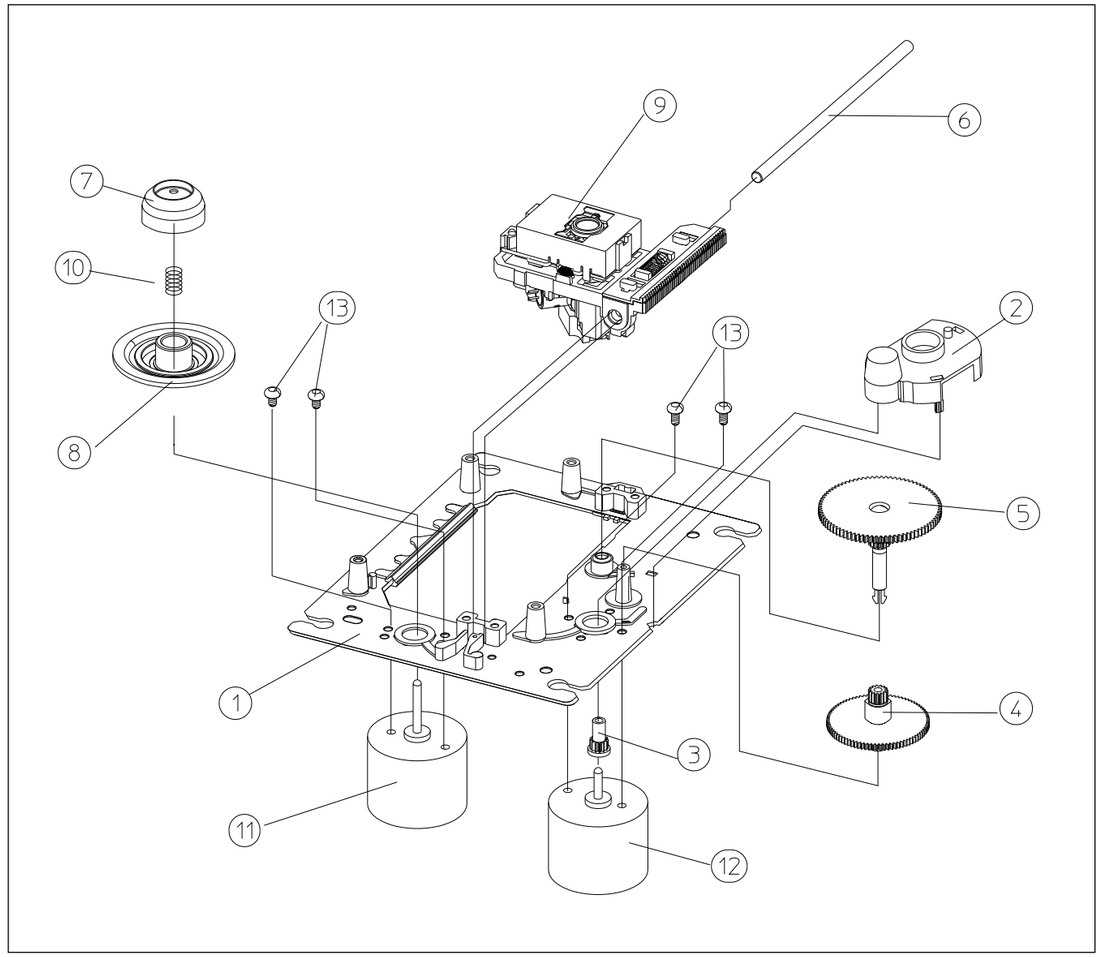
7-3-1 CD Pack Exploded View



7-4 CD DECK ASS'Y Parts List

No.	New Code No.	Description	Specification	Old Code No.
	CMSP30NM6	DECK -CD	BASIC	
1	AH61-10022C	CHASSIS-DECK(M)	CMSA30 POM M90-44	12001-0052-02
2	AH63-30048A	COVER-GEAR	CMS-V30 BLK ABS	13313-0057-00
3	AH66-20016A	GEAR(A)	CMS-V30 M0.3 Z13 SP POM	11474-0017-00
4	AH66-20017A	GEAR(B)	CMS-V30 M0.3 Z13 SP POM	11474-0018-00
5	AH66-20018A	GEAR(C)	CMS-V30 M0.3 Z16/Z90 SP POM	11474-0019-00
6	AH71-50036A	SHAFT-PU	CMS-V30 D3 L79 SUS420J2	11404-0041-00
7	15253-503-011	CENTER-RING	ABS+GS 20% CMS-V10N	15253-503-011
8	AH66-90018A	TURN-TABLE(M)	ABS+GS 20% CMS-V10N	12223-0003-00
9	AJ30-200013B	PICK-UP CDP	P/U SOH-A1 ROW V-P/J	*SOH-AP
10	AH61-60055A	SPRING-T/TABLE	CS STS-W PI0.4 D5.7 L9.3 CMS-V10N	12724-0062-00
11	AH31-10009A	MOTOR-SPINDLE	RF-310T-11400 43L 25V 85mA	16829-0004-00
12	AH31-10002B	MOTOR-FEED	RF-310TA 30MM NDM4RA3ETL 11.0MM	14769-057-250
13	AH60-10014A	SCREW-PH(+M2*3)	+M2X3 FE FZY W700	17008-120-032

7-4-1 CD DECK Exploded View



8. Electrical Parts List

Loc No.	New Code No.	Description	Specification	Old Code No.
	AH90-10618B	ASSY-PCB MAIN;MAX460VT,V-CD		
	AH90-10721A	ASSY-PCB SUB;MAX460V,V-CD AUDIO		
VQ1L,1R	0501-000407	TR-SMALL SIGNAL;KSD471A-Y,NPN,800MW		12149-401-150
VIC1	1201-000192	IC-OP AMP;4558,SIP,9P,-,DUAL,20V/MV		12119-401-630
VR7L,7R	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X		11018-877-104
VR1L,1R,5L,5R	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
VR11,12	2001-000440	R-CARBON;1OHM,5%,1/8W,AA,TP,1.8X3.2		11018-877-109
VR6L,6R	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-272
VR3L,3R	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
VR4L,4R,8,9	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
VR2L,2R	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
VC7	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V		11417-344-103
VC5	2401-000907	C-AL;22UF,20%,16V,GP,5*11,2MM,		11608-103-223
VC1L,1R	2401-001919	C-AL;2.2UF,20%,50V,-,4X7MM,5,TP		
VC2L,2R,3L,3R,4L,4R	2401-001975	C-AL;47UF,20%,16V,GP,5X11MM,5,TP		
VL1,2,3	2701-000114	INDUCTOR-AXIAL;10UH,10%,2.5X3.4MM		12429-411-100
VCW2	3711-000820	CONNECTOR-HEADER;BOX,2P,1R,2.5MM,ST		13349-512-561
VCW1	3711-000968	CONNECTOR-HEADER;BOX,4P,1R,2MM,STRA		13349-119-040
VCW3	3711-003107	CONNECTOR-HEADER;BOX,3P,1R,2.5MM,ST		
VJW1,2	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM,		
VJ1	AH37-20001R	JACK;S-437P-07,YEL/YEL/WHT/RED		
VTP1,2	AH61-40022A	STUD-TAP;SPC1,T0.5,BT2,-,-,		13124-100-710
FD1,2,3,4,BD1,2,5,6,8 JD1,4,5,6,7,HD1,2	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
CD1,2,3,4,5,AD101,103 RD6	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
RD9,11,12,AD104	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-4		A4104-0053
RD7,8,13	0402-000151	DIODE-RECTIFIER;1N5392,100V,1.5A,DO		12169-201-140
RD1	0402-000450	DIODE-BRIDGE;PBL403,200V,4.0A,DIP-4		12169-219-330
CZD2,3	0403-000354	DIODE-ZENER;UZ5.1B,5.1V,4.8-5.4V,50		12169-403-310
BZD1	0403-000374	DIODE-ZENER;UZ9.1BSC,9.1V,8.89-9.29		12169-404-840
RD5	0403-000377	DIODE-ZENER;UZP10B,10V,9.4-10.6V,1W		12169-403-240
RD3	0403-000389	DIODE-ZENER;UZP30B,30V,28-33V,1W,DO		A4106-0121
HZD1,RD16	0403-000394	DIODE-ZENER;UZP5.6B,5.6V,5.2-6.0V,1		12169-404-110
RD4	0403-000396	DIODE-ZENER;UZP6.8B,6.8V,6.4-7.2V,1		12169-404-100
IZD1	0403-000398	DIODE-ZENER;UZP8.2B,8.2V,7.7-8.7V,1		12169-403-600
LQ1L,1R,2L,2R	0501-000010	TR-SMALL SIGNAL;KSC1008-Y,NPN,80V,6		12149-301-050
FQ3,CQ6	0501-000294	TR-SMALL SIGNAL;KSA708-Y,PNP,800MW,		12149-101-560
CQ4	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,		12149-101-520
RQ1	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800MW		12139-301-310
FQ1,2	0501-000392	TR-SMALL SIGNAL;KSC838-O,NPN,250MW,		12149-301-860
FQ001,LQ6,AQ103L AO103R	0501-000394	TR-SMALL SIGNAL;KSC900-L,NPN,250MW,		12149-301-840
HQ3,CQ5,8,BQ5,6 JQ1L,1R	0501-000398	TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,		12149-301-900
CQ7	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO		
RQ2	0502-000148	TR-POWER;2SB1185,PNP,2W,TO-220FP,BK		B4052-0035
JQ2L,2R,3L,3R,8,CQ9	0504-000121	TR-DIGITAL;KSR1007,NPN,300MW,22K-47		12159-301-800

Loc No.	New Code No.	Description	Specification	Old Code No.
AQ102				
JQ9L,9R,PQ2L,2R,CQ10	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300MW,4.7K,		12159-301-790
CQ1,JQ4,5,6,AQ101	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22		
PQ1,RQ3				
ZIC1,BIC2	1201-000192	IC-OP AMP;4558,SIP,9P,-,DUAL,20V/MV		12119-401-630
JIC1	1201-000358	IC-PREAMP;22291,DIP,24P,-,DUAL,-,PL		A4012-0070
RIC1	1203-000166	IC-POSI.ADJUST REG.;3950,SIP,12P,-,		B4008-1198
BIC1	1204-000235	IC-VOLUME CONTROL;TDA7318,SOP,28P,-		B4008-1199
FR4	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3		11018-877-391
JR9L,9R	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-153
LR3	2001-000032	R-CARBON;180OHM,5%,1/4W,AA,TP,2.4X6		11018-277-181
AR121,122	2001-000062	R-CARBON;470OHM,5%,1/4W,AA,TP,2.4X6		11018-277-471
RR7	2001-000066	R-CARBON(S);10KOHM,5%,1/2W,AA,TP,2.		11018-377-103
IR10	2001-000117	R-CARBON(S);68OHM,5%,1/2W,AA,TP,2.4		11018-377-680
IR14L,14R	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
BR3L,3R,HR10,CR7	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X		11018-877-104
FR17	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3		11018-877-101
BR4,5L,5R,HR42,43	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
JR15,27				
CR6,15,20,HR23,JR37,AR130				
SR1L,1R,35,37,JR17,29				
LR4,6,IR13	2001-000331	R-CARBON;12KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-123
RR16	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-183
FR5,HR4,CR10,ZR10,IR11	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
BR6L,6R,10,11,HR2				
RR3	2001-000435	R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-105
JR6L,6R,7L,7R,HR15,7	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
AR124L,124R,PR2L,2R				
JR12L,12R,23L,23R	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-272
FR3,ZR4L,4R,PR1L,1R				
JR22L,22R	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X		11018-877-224
FR6,8,11,BR12,AR127L	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3		11018-877-221
AR127R				
CR4,12,13,17,AR129	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
JR32,36,AR101L,101R				
RR1				
IR4,LR5	2001-000527	R-CARBON;22OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-220
RR15,ZR2L,2R	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-273
IR5,FR10,JR15R	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X		11018-877-332
IR2,CR9,JR14L,14R	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X		11018-877-392
IR7,RR6	2001-000666	R-CARBON;33OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-330
CR11	2001-000689	R-CARBON;390KOHM,5%,1/8W,AA,TP,1.8X		11018-877-394
JR26,BR1L,1R	2001-000702	R-CARBON;39KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-393
JR20	2001-000708	R-CARBON;39OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-390
HR16,17,18,19,40,41,3	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
CR3,16,BR3,IR3				
JR24L,24R,25L,25R				
JR01L,01R	2001-000745	R-CARBON;4.7OHM,5%,1/8W,AA,TP,1.8X3		11018-877-479
JR18	2001-000773	R-CARBON;470KOHM,5%,1/8W,AA,TP,1.8X		11018-877-474
CR8,BR7L,7R	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3		11018-877-471

Loc No.	New Code No.	Description Specification	Old Code No.
JR13L,13R,AR117	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3	11018-877-473
SR45,46	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.	11018-877-470
FR001,JR1L,1R,8,21,CR18 BR2,8L,8R,13,IR6,12L,12R LR1L,1R,2L,2R,SR31,33	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X	
FR18,AR104L,104R	2001-000857	R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3	11018-877-561
JR2L,2R,IR9,CR5	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X	11018-877-682
HR5,ZR11	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3	11018-877-681
JR19	2001-000938	R-CARBON;68OHM,5%,1/8W,AA,TP,1.8X3.	11018-877-680
IR1	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X	11018-877-822
JR10L,10R,5	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3	11018-877-821
AR115	2001-001000	R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3	11018-877-823
JR11L,11R	2001-001006	R-CARBON;82OHM,5%,1/8W,AA,TP,1.8X3.	11018-877-820
HR6	2001-001077	R-CARBON(S);150OHM,5%,1/2W,AA,TP,2.	11018-377-151
AR105,106,132	2001-001088	R-CARBON(S);1KOHM,5%,1/2W,AA,TP,2.4	11018-377-102
AR108,110,111	2001-001093	R-CARBON(S);2.2KOHM,5%,1/2W,AA,TP,2	11018-377-222
AR120L,120R	2001-001146	R-CARBON(S);4.7OHM,5%,1/2W,AA,TP,2.	11018-377-479
AR109	2003-000549	R-METAL OXIDE(S);2.2KOHM,5%,1W,AA,T	11048-477-222
AR107,114	2008-000121	R-FUSIBLE;100OHM,5%,1/4W,AA,TP,2.6X	11058-223-101
JSVR15L	2103-000171	VR-SEMI;10KOHM,30%,1/10W,TOP	11249-102-034
CVR1	2103-000341	VR-SEMI;2KOHM,30%,1/10W,TOP	11249-102-104
IVR1	2103-000492	VR-SEMI;5KOHM,30%,1/10W,TOP	11249-102-024
HC12	2201-000247	C-CERAMIC,DISC;15PF,5%,50V,NPO,4X3.	11407-057-150
IC34	2201-000260	C-CERAMIC,DISC;180PF,10%,50V,SL,4*4	11407-018-181
HC7	2201-000300	C-CERAMIC,DISC;1NF,20%,50V,Y5T,4X4,	11417-329-102
RC104	2201-000381	C-CERAMIC,DISC;22NF,20%,50V,Y5V,8.0	11417-344-223
HC11	2201-000423	C-CERAMIC,DISC;27PF,5%,50V,NPO,5.0X	11407-057-270
FC10	2201-000426	C-CERAMIC,DISC;27PF,5%,50V,SL,4X3.5	11407-017-270
BC28	2201-000432	C-CERAMIC,DISC;2PF,0.3PF,50V,NPO,5.	11407-052-209
RC100,101	2201-000520	C-CERAMIC,DISC;4.7NF,+80-20%,400VAC	11469-501-070
IC1,12,BC2,21,25 FC5,RC13	2201-000565	C-CERAMIC,DISC;47nF,20%,50V,Y5V,12.	11417-344-473
RC102,103	2201-000783	C-CERAMIC,DISC;100NF,+80%,-20%,50V,	11417-104-104
IC19	2201-000946	C-CERAMIC,DISC;820PF,0.1,50V,Y5P,3.	
AC201L,201R,ZC4L,4R	2202-000263	C-CERAMIC,MLC-AXIAL;470PF,10%,50V,Y	11449-518-471
BC12L,12R,13L,13R	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,5	11449-010-104
FC001,002,HC1,2,3,9,IC15 JC7L,7R,8L,8R,16L,16R,BC4 LC1L,1R,IC11,RC105	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y	11449-518-101
HC6,AC101L,101R,120,121	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P	11449-518-102
BC18,19,AC104L,104R	2202-000806	C-CERAMIC,MLC-AXIAL;220PF,10%,50V,Y	11449-518-221
FC4,8,9,IC31,32,CC3,6 JC12,BC24,AC109 ZC10,11,JC100,SC14	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25	11448-010-223
BC1L,1R	2202-000830	C-CERAMIC,MLC-AXIAL;82PF,10%,50V,Y5	11449-518-820
JC3L,3R	2202-000847	C-CERAMIC,MLC-AXIAL;1,8NF,0.3,50V,Y	
JC2L,2R,BC10L,10R	2202-000848	C-CERAMIC,MLC-AXIAL;1.5NF,0.3,50V,Y	
ZC3L,3R	2202-000850	C-CERAMIC,MLC-AXIAL;2.2NF,0.3,16V,Y	
IC8	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,0.3,50V,Y5	
JC1L,1R	2301-000370	C-FILM,PEF;1.8NF,10%,50V,5.5X7X2.8M	

Loc No.	New Code No.	Description	Specification	Old Code No.
LC3,5	2301-000379	C-FILM,PEF;10NF,10%,50V,6X7X3.2MM,5		
IC29L,29R	2301-000385	C-FILM,PEF;12NF,10%,50V,6.5X8.5X3.2		
JC4L,4R	2301-000390	C-FILM,PEF;15NF,10%,50V,6.5X9X3.5MM		
JC5L,5R,11L,11R	2301-000393	C-FILM,PEF;18NF,10%,50V,6.5X12.5X3.		
LC2	2301-000400	C-FILM,PEF;1NF,10%,50V,5X7X2.8MM,5M		
BC15L,15R	2301-000407	C-FILM,PEF;2.7NF,10%,50V,5.5X7X3MM,		
JC18L,18R	2301-000428	C-FILM,PEF;3.9NF,5%,50V,5.5X12X3,3M		11505-713-392
IC21,22	2301-000430	C-FILM,PEF;33NF,10%,50V,7.5X11X4MM,		
IC18	2301-000442	C-FILM,PEF;4.7NF,10%,50V,5.5X7X3MM,		
IC2,9	2301-000449	C-FILM,PEF;47NF,10%,50V,8X11X4.5MM,		
JC18L,18R	2301-000453	C-FILM,PEF;5.6NF,10%,50V,5.5X7X3MM,		
AC114L,114R	2301-000469	C-FILM,PEF;68NF,10%,50V,9X12X4.5MM,		
JC13L,13R	2301-000475	C-FILM,PEF;8.2NF,5%,50V,6.5X12X3.5,		11505-713-822
JC25L,25R	2301-000476	C-FILM,PEF;82NF,10%,50V,10.5X12.5X6		11505-714-823
RC20	2401-000118	C-AL;1000UF,20%,10V,GP,10X12.5,5MM,		
LC4,IC10,AC131,JC26	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP		11608-102-104
CC10,AC110,RC15	2401-000303	C-AL;100UF,20%,25V,GP,6.3*11,2.5MM,		11608-104-104
IC3,14,13,JC23,CC2	2401-000419	C-AL;10UF,20%,16V,GP,5X11,5,-		
AC111	2401-000471	C-AL;10UF,20%,50V,BP,6X11MM,5MM,TP		
RC12,AC105,106	2401-000475	C-AL;10UF,20%,50V,GP,5*11,2MM,		11608-106-100
HC10	2401-000778	C-AL;220UF,20%,10V,GP,6.3X11,2.5MM,		11608-102-224
RC14,BC27,23	2401-000795	C-AL;220UF,20%,16V,GP,8X11.5,3.5MM,		
RC5	2401-000871	C-AL;220UF,20%,50V,GP,10X16MM,5MM,		11609-402-300
CC1,BC17	2401-000907	C-AL;22UF,20%,16V,GP,5*11,2MM,		11608-103-223
JC17L,17R	2401-001019	C-AL;3.3UF,20%,50V,GP,4X7,1.5MM,		
HC4,JC9L,9R,14L,14R JC27L,27R	2401-001022	C-AL;3.3UF,20%,50V,GP,5*11,2MM,		11608-106-332
JC24,10	2401-001102	C-AL;330UF,20%,16V,GP,8X11,-,		
ZC12,14	2401-001164	C-AL;33UF,20%,16V,GP,5*11,2MM,		11608-103-333
RC6	2401-001364	C-AL;470UF,20%,16V,GP,10X12MM,5MM,T		11608-103-471
JC6L,6R,15L,15R,22	2401-001465	C-AL;47UF,20%,10V,GP,5*11,2MM,		11608-102-473
AC107L,107R	2401-001538	C-AL;47UF,20%,25V,GP,6X11,2.5MM,-		
AC130	2401-001572	C-AL;47UF,20%,50V,GP,6.3*11,2.5MM,		11608-106-470
RC1,8,9,BC16,AC113L AC113R,SC20,21	2401-001895	C-AL;100UF,20%,16V,GP,6.3X11MM,2.5M		
IC6,7,20,23,24,CC5 AC127L,127R	2401-001912	C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK		
AC129	2401-001938	C-AL;22UF,20%,25V,GP,5X11MM,2MM,BK		
BC2L,2R,IC4,27L,27R AC102,128,NO-LOCATION	2401-001954	C-AL;4.7UF,20%,50V,GP,5X11MM,5,TP		
IC5	2401-001968	C-AL;470NF,20%,50V,GP,5X11MM,5,TP		
IC17,FC6	2401-001975	C-AL;47UF,20%,16V,GP,5X11MM,5,TP		
AC110	2401-002168	C-AL;100UF,0.2,50V,GP,10X12.5,5MM,T		
BC4L,4R,5L,5R,6L,6R,7L,7R BC8L,8R,11L,11R,14L,14R ZC13,1L,1R,SC1L,1R,6L,6R	2401-002180	C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP		
RL1	2701-000179	INDUCTOR-AXIAL;33UH,10%,4.2X9.8MM		12429-311-330
LL2	2701-000298	INDUCTOR-AXIAL;470UH,10%,4.2X9.8MM		12429-070-130
HX1	2801-000734	CRYSTAL-UNIT;7.2MHZ,50PPM,28-AAM,12		14539-501-140
ICF4	2802-000215	RESONATOR-CERAMIC;19KHZ,+-38HZ,-,7.		14539-504-100
ICF1	2903-000105	FILTER-CERAMIC;BP,10.7MHZ+-25KHZ		14529-301-753

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ICF5	2903-000148	FILTER-CERAMIC;BP,450KHZ+-1KHZ		A1243-0049
MCW2	3710-001045	CONNECTOR-SOCKET;22P,1R,1.25MM,ANGL		
JCW501	3711-000588	CONNECTOR-HEADER;BOX,10P,1R,2.5MM,S		13349-103-103
JCW301	3711-000903	CONNECTOR-HEADER;BOX,3P,1R,2.5MM,ST		13349-527-502
JCW401	3711-003110	CONNECTOR-HEADER;BOX,4P,1R,2.5MM,ST		
AJ1	3716-000209	TERMINAL-BLOCK;,-,-,60V,7A		13303-500-620
AJ2	3722-000363	JACK-PHONE;9P,6.4MM,AU,BLK,-		A3040-0115
BJ1	3722-000377	JACK-RCA;4P/2C,3.5MM,SN,BLK,#16~22		A3040-0218
BR2L,2R,AR102L,102R AR103L,103R	61048-177-563	R-CARBON;RD 1/8 T 563-J		
HIC1	AH14-10007G	IC;LC72131,DIP,STICK PLL		
IIC1	AH14-10007H	IC;LA1836,DIP,STICK IF+MPX		
LPF1,2	AH26-10001A	TRANS-IF;FV-AD-BASE19K/38K,LOW PASS		12450-304-040
IFT1	AH26-10001E	TRANS-IF;KS940228-09,-,-,7.6X12.0,-		12619-030-005
LL1	AH26-10002G	TRANS-IF;IODT-N5002,BIAS-OSC,3.7MH,		12619-573-071
JL1L,1R	AH26-10002Y	COIL-TRAP;FB875-85A,BIAS-TRAP,35DB,		12429-306-113
IFT2	AH26-10020A	TRANS-DET;-,7KLL,DET,-,7.8MM,91PF,1		
FW1	AH39-50001H	LEAD-FASTEN;RING,1007#24,100MM,BLK		13059-201-103
TO CHASSIS	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM,		
JTP1	AH61-40022A	STUD-TAP;SPC1,T0.5,BT2,-,-,		13124-100-710
EZD1,MZD1	0403-000393	DIODE-ZENER;UZP5.1B,5.1V,4.8-5.4V,1		12169-403-330
EIC1	1204-000208	IC-SOUND PROCESSOR;M65840F,SOP,28P,		B4012-0530
ER1,19,20,25,26 ER27,28	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
ER29,30,31	2001-000295	R-CARBON;10MOHM,5%,1/8W,AA,TP,1.8X3		
ER17,32	2001-000435	R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-105
MR15	2001-000666	R-CARBON;33OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-330
ER2,3,16,18,21	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
MR16	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
ER23	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X		
MR18,ER37	2003-000008	R-METAL OXIDE(S);100OHM,5%,1W,AA,TP		11048-477-101
EC19,20,MC33,34	2201-000573	C-CERAMIC,DISC;47PF,5%,50V,NPO,6.5X		11407-057-470
EC2,5,MC27	2202-000263	C-CERAMIC,MLC-AXIAL;470PF,10%,50V,Y		11449-518-471
EC1,3,6	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5		
EC23,MC37	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25		11448-010-223
EC4	2202-000848	C-CERAMIC,MLC-AXIAL;1.5NF,0.3,50V,Y		
MC24,32,EC9	2301-000379	C-FILM,PEF;10NF,10%,50V,6X7X3.2MM,5		
MC25,31	2301-000404	C-FILM,PEF;2.2NF,10%,50V,5.5X7X3.2M		
EC11	2301-000442	C-FILM,PEF;4.7NF,10%,50V,5.5X7X3MM,		
MC11,EC12,13,14	2301-000449	C-FILM,PEF;47NF,10%,50V,8X11X4.5MM,		
EC16,17,18,MC23,26,30	2301-000469	C-FILM,PEF;68NF,10%,50V,9X12X4.5MM,		
MC22,29	2303-000312	C-FILM,PPF;100NF,5%,63V,7.5X12.5X3.		A1102-0164
EC22,24,MC28	2401-001465	C-AL;47UF,20%,10V,GP,5*11,2MM,		11608-102-473
MC45,46	2401-001919	C-AL;2.2UF,20%,50V,-,4X7MM,5,TP		
EC7,MC10,38	2401-002180	C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP		
EX1	2802-000113	RESONATOR-CERAMIC;16MHZ,0.5%,BK,10.		
MX1	2802-000158	RESONATOR-CERAMIC;4MHZ,0.5%,TP,10.0		14534-504-043
MCON1	3809-001036	CABLE-FLAT;300V,80C,150MM,4P,2.5MM,		
EJW01,02,05,06	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM,		
MIC2	AH14-10007E	IC;M65846FP,SOP,STICK DSP/ECHO		
MD01,02,03,04,1,2,4,5	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		

Loc No.	New Code No.	Description	Specification	Old Code No.
MD50				
MZD1	0403-000393	DIODE-ZENER;UZP5.1B,5.1V,4.8-5.4V,1		12169-403-330
MZD2	0403-000399	DIODE-ZENER;UZP9.1B,9.1V,8.5-9.6V,1		12169-403-340
MQ50	0501-000394	TR-SMALL SIGNAL;KSC900-L,NPN,250MW,		12149-301-840
MQ1	0504-000121	TR-DIGITAL;KSR1007,NPN,300MW,22K-47		12159-301-800
MIC3	1201-000192	IC-OP AMP;4558,SIP,9P,-,DUAL,20V/MV		12119-401-630
MR50	2001-000003	R-CARBON;330OHM,5%,1/8W,AA,TP,1.8X3		11018-877-331
MR4,8	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-153
MR7	2001-000117	R-CARBON(S);68OHM,5%,1/2W,AA,TP,2.4		11018-377-680
MR3,11	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-122
MR02L,02R	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
MR05L,05R	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X		11018-877-104
MR25,26	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
MR27,28	2001-000356	R-CARBON;150KOHM,5%,1/8W,AA,TP,1.8X		11018-877-154
MR6,9,23,24	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
MR2,12	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
MR1,13	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X		11018-877-224
MR51	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X		11018-877-332
MR5,10	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
MR01L,01R	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X		11018-877-682
MR30,31	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3		11018-877-681
MVR1	2101-000274	VR-ROTARY;5KOHM,20%,1/20W,SIDE		B1050-0041
MC8,12	2201-000565	C-CERAMIC,DISC;47nF,20%,50V,Y5V,12.		11417-344-473
MC01,02	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P		11449-518-102
MC7,20	2202-000809	C-CERAMIC,MLC-AXIAL;3.3NF,20%,16V,Y		11447-619-332
MC18	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP		11608-102-104
MC4,15	2401-000419	C-AL;10UF,20%,16V,GP,5X11,5,-		
MC50	2401-001355	C-AL;470UF,20%,10V,GP,8X11.5,5MM,		
MC3,16,36	2401-001465	C-AL;47UF,20%,10V,GP,5*11,2MM,		11608-102-473
MC9	2401-001895	C-AL;100UF,20%,16V,GP,6.3X11MM,2.5M		
MC5,6	2401-001919	C-AL;2.2UF,20%,50V,-,4X7MM,5,TP		
MC1,13,14,19	2401-002180	C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP		
MC41L,41R,42,43				
MCW3	3710-001046	CONNECTOR-SOCKET;10P,1R,1.25MM,ANGL		
MCW1	3711-001055	CONNECTOR-HEADER;BOX,6P,1R,2.5MM,ST		13349-512-565
MJ1,2	3722-000363	JACK-PHONE;9P,6.4MM,AU,BLK,-		A3040-0115
JR28L,28R	61048-177-563	R-CARBON;RD 1/8 T 563-J		
MIC1	AH14-10007F	IC;M62453SP,DIP,STICK VOCAL FADER/M		
MCON1	AH39-20010T	LEAD-CONNECTOR ASS'Y;5264,5395,6P,3		13078-496-135
JLW1	AH39-50001G	LEAD-FASTEN;,1007#24,350MM,BLK		13059-101-353
MTP1	AH61-40022A	STUD-TAP;SPC1,T0.5,BT2,-,-,		13124-100-710
MIC-WIRE	AH65-30013A	CLAMP-CORD;,-,DALA-2,-,		16634-517-300
SD1	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
SQ3	0504-000121	TR-DIGITAL;KSR1007,NPN,300MW,22K-47		12159-301-800
SQ1,2	0504-000148	TR-DIGITAL;KSR2007,PNP,300MW,22K-47		12149-301-150
SIC3	1001-000111	IC-ANALOG SWITCH;GD4066B,BILATERAL		
SIC2	1201-000463	IC-OP AMP;074,SOP,14P,196MIL,SINGLE		
SR10	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-153
SR6,11	2001-000010	R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-683
SR14	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
SR17,23	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X		11018-877-104

Loc No.	New Code No.	Description	Specification	Old Code No.
SR16,22	2001-000319	R-CARBON;120KOHM,5%,1/8W,AA,TP,1.8X		11018-877-124
SR28	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-183
SR27	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-272
SR32,34	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3		11018-877-221
SR18,24,29,30,39,41	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
SR26,42	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X		11018-877-392
SR3,4,5,7,8,12	2001-000666	R-CARBON;33OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-330
SR13	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3		11018-877-471
SR19,25,40	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
SR15,38	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3		11018-877-821
SR20,21	2001-001000	R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-823
SC14	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25		11448-010-223
SC22	2301-000442	C-FILM,PEF;4.7NF,10%,50V,5.5X7X3MM,		
SC2,3	2401-001887	C-AL;100NF,20%,50V,-,4X7MM,5,TP		
SC4,5	2401-001919	C-AL;2.2UF,20%,50V,-,4X7MM,5,TP		
SC11	2401-001968	C-AL;470NF,20%,50V,GP,5X11MM,5,TP		
FFQ2	0501-000398	TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,		12149-301-900
FFQ1	0502-000241	TR-POWER;KSA614,PNP,25W,TO-220,BK,4		12139-103-560
FFQ3	0502-000407	TR-POWER;KTC4369Y,NPN,15W,TO-220,BK		A4050-0037
AIC102	1201-000192	IC-OP AMP;4558,SIP,9P,-,DUAL,20V/MV		12119-401-630
AIC101	1201-000328	IC-POWER AMP;4141,SIP,18P,-,-,-,PLA		12119-208-080
RR5,PIPE	13954-100-310	CERAMIC-PIPE;PI1.4 15MM WHT		
THERMISTOR	1404-000172	THERMISTOR-NTC;100OHM,-,-,-,BK		
RR11	2001-000052	R-CARBON(S);3.3KOHM,5%,1/2W,AA,TP,2		11018-377-332
RR12	2001-000060	R-CARBON;6.8KOHM,5%,1/4W,AA,TP,2.4X		11018-277-682
RR2	2001-000116	R-CARBON;820OHM,5%,1/4W,AA,TP,2.4X6		11018-277-821
AR202L,202R	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
AR204	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3		11018-877-101
AR201L,201R	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
ZR3L,3R	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3		11018-877-151
AR125L,125R	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
AR203L,203R,FFR4	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
FFR1	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
RR10,FFR3	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X		11018-877-392
FFR2	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
RR5	2003-000703	R-METAL OXIDE(S);470OHM,5%,3W,AA,TP		
FFR5	2003-000710	R-METAL OXIDE(S);47OHM,5%,2W,AA,TP,		11048-577-470
FFC1	2401-000871	C-AL;220UF,20%,50V,GP,10X16MM,5MM,		11609-402-300
RC2,3	2401-001067	C-AL;3300UF,20%,42V,GP,18*35.5,7.5M		11609-116-332
BC20	2401-001975	C-AL;47UF,20%,16V,GP,5X11MM,5,TP		
RC7	2401-003116	C-AL;4700UF,20%,35V,-,18X35.5,7.5,B		
PCW1	3711-000724	CONNECTOR-HEADER;BOX,15P,1R,2MM,STR		A6010-0169
FFCW3	3711-000820	CONNECTOR-HEADER;BOX,2P,1R,2.5MM,ST		13349-512-561
RW1,4	3811-000130	WIRE-PVC CU;BCWA,300V,60MM,7/0.16MM		13049-011-106
RW2	3811-000131	WIRE-PVC CU;BCWA,300V,80MM,7/0.16MM		13049-011-108
PJW4,SJW12	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM,		
FFIC3	AH14-10003E	IC;KIA7812PI,-,TO-220		
FAN	AH31-10020A	FAN-DC;D0620B-12M,12VDC/0.16A,		A3070-0112
FFCW2	AH39-20008M	LEAD-CONNECTOR ASS'Y;5264,5395,2P,1		13078-472-115
PCON3	AH39-20008Q	LEAD-CONNECTOR ASS'Y;5264,5395,2P,3		13078-472-130
PCON2	AH39-20010M	LEAD-CONNECTOR ASS'Y;5264,5395,3P,3		13078-493-135

Loc No.	New Code No.	Description	Specification	Old Code No.
FFCW5	AH39-20019M	LEAD-CONNECTOR ASS'Y;5051,5395,3P,2		16439-0124-00
RCON1	AH39-20514A	LEAD CONNECTOR-ASSY;-,5264,51088,10		
PCON1	AH39-20521A	LEAD CONNECTOR-ASSY;-,51004,5295,5P		
FFCW4	AH39-20559W	LEAD CONNECTOR-ASSY;-,5264,51088,5P		
RW3	AH39-50001G	LEAD-FASTEN;,1007#24,350MM,BLK		13059-101-353
MAIN-PCB	AH41-10470A	PCB-MAIN;MAX460V,1L,PHENOL,330X297X		
HEAT-SINK	AH62-30017A	HEAT SINK;AL,-,-,-,-,-,MAX445,-		11122-0073-00
FR13	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-183
FR14	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
BC3	2201-000247	C-CERAMIC,DISC;15PF,5%,50V,NPO,4X3.		11407-057-150
BC26	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25		11448-010-223
ICF3	2903-000105	FILTER-CERAMIC;BP,10.7MHZ+-25KHZ		14529-301-753
FJ1	3716-000201	TERMINAL-BLOCK;NON SOLDER,4P,4MM,-,		A3059-0006
BL1	AH27-80060A	COIL-OSC;RBW07VB,345UH,AM+RF		
FP1	AH40-10025A	TUNER-FM;FTA4-551H,4G,75OHM		
BD3,4	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-4		A4104-0053
BZD2	0403-000396	DIODE-ZENER;UZP6.8B,6.8V,6.4-7.2V,1		12169-404-100
BQ2	0501-000294	TR-SMALL SIGNAL;KSA708-Y,PNP,800MW,		12149-101-560
BQ1	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800MW		12139-301-310
BQ4	0504-000121	TR-DIGITAL;KSR1007,NPN,300MW,22K-47		12159-301-800
BR14	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
BR15	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
BR16	2003-000674	R-METAL OXIDE(S);39OHM,5%,1W,AA,TP,		11048-477-390
FC003	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y		11449-518-101
BC22	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25		11448-010-223
BJ2,3	3722-000342	JACK-DC POWER;2P,-,NI,BLK,#16~22		13333-501-410
BJW29	3811-000389	WIRE-NO SHEATH CU;SPCW,300V,52.4MM,		
JR50L,50R	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
JC50L,50R	2401-002180	C-AL;2.2UF,0.2,50V,GP,5X11,5MM,TP		
JW1	3811-000131	WIRE-PVC CU;BCWA,300V,80MM,7/0.16MM		13049-011-108
AH90-10619F		ASSY-PCB FRONT;MAX460V,50/9K 12HR S		
UD1,2,3,4,50,51,53 UD40,41,42,43,55,56	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
UZD1	0403-000344	DIODE-ZENER;UZ3.9B,3.9V,3.7-4.1V,50		12169-403-490
UQ9	0501-000294	TR-SMALL SIGNAL;KSA708-Y,PNP,800MW,		12149-101-560
UQ1,10	0501-000398	TR-SMALL SIGNAL;KSC945-Y,NPN,250MW,		12149-301-900
UQ30,31,32	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22		12159-301-780
UQ17	0504-000121	TR-DIGITAL;KSR1007,NPN,300MW,22K-47		12159-301-800
UQ3,4,5,6,7,8,11,12,16 UQ13,14	0504-000122	TR-DIGITAL;KSR1009Y,NPN,300MW,4.7K,		12159-301-790
UQ2	0504-001003	TR-DIGITAL;KSR2003,PNP,300MW,22K-22		
UD16,17,18,19,22,23 UD5,6,7,26,27,28,29,30,31 UD36,37	0601-000141	LED;ROUND,GRN,3.1MM,555NM		A4150-0290
UD20,21,24 UD32,33,34,35	0601-000185	LED;ROUND,ORG,3.1MM,610NM		A4150-0288
UD38	0601-000245	LED;ROUND,RED,3.1MM,650NM		12309-001-450
UR82,84,86,97	2001-000003	R-CARBON;330OHM,5%,1/8W,AA,TP,1.8X3		11018-877-331
UR26,27,36,37	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X		11018-877-152
UR61,62,63	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X		11018-877-104

Loc No.	New Code No.	Description	Specification	Old Code No.
UR5,6,7,8,51,52,53,54	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
UR55,56,57,58,59,60,65				
UR66,67,68				
UR73	2001-000325	R-CARBON;120OHM,5%,1/8W,AA,TP,1.8X3		11018-877-121
UR71,72,74,46,47,48	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3		11018-877-151
UR7,78				
UR98	2001-000405	R-CARBON;180OHM,5%,1/8W,AA,TP,1.8X3		
UR24,25,34,35,79	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
UR15,16,17,18,106				
UR44,45				
UR1,11,12,13,14,28,38	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X		11018-877-222
UR69,70,99,107,108,109,110				
UR111,112,113,105				
UR19,20,100,101,102				
UR103,104				
UR29,39	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-272
UR3	2001-000508	R-CARBON;220KOHM,5%,1/8W,AA,TP,1.8X		11018-877-224
UR64	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3		11018-877-271
UR30,40	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X		11018-877-332
UR50	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X		11018-877-392
UR87,88,89,90,91,92,93	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
UR94,95,96,81,2				
UR75,76	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3		11018-877-471
UR80	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-473
UR4	2001-000793	R-CARBON;47OHM,5%,1/8W,AA,TP,1.8X3.		11018-877-470
UR83,85	2001-000857	R-CARBON;560OHM,5%,1/8W,AA,TP,1.8X3		11018-877-561
UR49	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X		11018-877-682
UR21,31,UR41	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3		11018-877-681
UR22,23,32,33	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3		11018-877-821
UR42,43				
UC13,14	2201-000223	C-CERAMIC,DISC;12PF,5%,50V,NPO,5.0X		11407-057-120
UC7,8	2201-000423	C-CERAMIC,DISC;27PF,5%,50V,NPO,5.0X		11407-057-270
UC2,11,12,15,22,24,9	2201-000565	C-CERAMIC,DISC;47nF,20%,50V,Y5V,12.		11417-344-473
UC32,33,35,36,37,38,39	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25		11448-010-223
UC10,40	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP		11608-102-104
UC5	2401-000244	C-AL;100UF,20%,10V,GP,6.3*7,2.5MM,T		11608-152-104
UC20	2401-001572	C-AL;47UF,20%,50V,GP,6.3*11,2.5MM,		11608-106-470
UC21,23	2401-001904	C-AL;10UF,20%,16V,-,4X7MM,5,TP		
UC19	2401-001912	C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK		
UC4	2401-001931	C-AL;220NF,20%,50V,-,4X7MM,5,TP		
UC53,54,1	2401-001952	C-AL;4.7UF,20%,50V,-,4X7MM,5,TP		
UC6	2409-000123	C-EDL;47000UF,4UA,5.5V,-,-,5MM,BK		B1104-0540
UX1	2801-001382	CRYSTAL-UNIT;12MHZ,50PPM,28-AAM,10P		A1280-0017
UX2	2801-001394	CRYSTAL-UNIT;32.768KHZ,20PPM,28-AAY		14539-502-350
USW1,2,3,4,5,6,7,8	3404-000165	SWITCH-TACT;12V,50MA,160GF+-50GF,6X		13559-901-100
USW9,10,11,12,17,29,30				
USW18,19,20,21,22				
USW13,14,15,16				
USW23,24,25,26,27,28				
UVR1,2	3406-000162	SWITCH-ROTARY;5V,50MA,SPDT,20MM		A3012-0018
UCW4	3708-000266	CONNECTOR-FPC/FC/PIC;32P,1.25MM,STR		B6013-0069

Loc No.	New Code No.	Description	Specification	Old Code No.
UCW3	3708-000303	CONNECTOR-FPC/FC/PIC;6P,1.25MM,STRA		B6010-0352
UCW3-1	3708-000448	CONNECTOR-FPC/FC/PIC;6P,1.25MM,STRA		B6010-1610
UCW2	3711-003097	CONNECTOR-HEADER;NOWALL,10P,1R,1.25		
UCW1	3711-003104	CONNECTOR-HEADER;NOWALL,22P,1R,1.25		
UCW3-UCW3-1	3809-000199	CABLE-FLAT;30V,80C,300MM,6P,1.25MM,		B6032-0072
FLT1	AH07-20045C	VF-DISPLAY;SVA-10SS06,-,104.14X25,M		
UIC1	AH09-10061Q	IC-MCU;LC866224-5D65,100P,QFP,MASK,		
UIC2,3	AH14-10004M	IC;NJU3713G,SOP,TAPE 18P		
UE1	AH59-60001J	MODULE-REMOCON;GP1U271R,38KHZ,-,MES		B1294-0043
FLT-HOLDER	AH61-20080A	HOLDER-FLT;ABS,94HB,BLK,-,SCM-7450,		13322-0146-00
UD12	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,5		
AH90-10620H	ASSY-PCB POWER;MAX460V,220V CP2			
RD1,2,VD5,6	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-4		A4104-0053
VD1,2,3,4	0402-000151	DIODE-RECTIFIER;1N5392,100V,1.5A,DO		12169-201-140
VZD1	0403-000399	DIODE-ZENER;UZP9.1B,9.1V,8.5-9.6V,1		12169-403-340
VQ2	0501-000331	TR-SMALL SIGNAL;KSC1009-Y,NPN,800MW		12139-301-310
VQ1	0502-000241	TR-POWER;KSA614,PNP,25W,TO-220,BK,4		12139-103-560
VQ3	0502-000304	TR-POWER;KSD882,NPN,1W,TO-126,TP,60		12149-401-900
VIC2	1203-000122	IC-NEGA.FIXED REG.;7908,TO-220,3P,-		12119-601-840
VR11	2001-000109	R-CARBON(S);470OHM,5%,1/2W,AA,TP,2.		11018-377-471
VR7	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-103
VR4,6,8	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3		11018-877-223
VR10	2003-000603	R-METAL OXIDE(S);270OHM,5%,1W,AA,TP		11048-477-271
VR9	2003-000690	R-METAL OXIDE(S);4.7OHM,5%,2W,AA,TP		11048-577-479
VR5	2003-000734	R-METAL OXIDE(S);560OHM,5%,2W,AA,TP		11048-577-561
PSC1,2,VC6	2201-000520	C-CERAMIC,DISC;4.7NF,+80-20%,400VAC		11469-501-070
VC3	2401-001364	C-AL;470UF,20%,16V,GP,10X12MM,5MM,T		11608-103-471
VC2	2401-001413	C-AL;470UF,20%,35V,GP,10X20,5MM,		11609-402-130
VC4,5	2401-001895	C-AL;100UF,20%,16V,GP,6.3X11MM,2.5M		
VC1	2401-001942	C-AL;3300UF,20%,35V,GP,18X35.5MM,7.		11607-105-332
RC4	2401-002168	C-AL;100UF,0.2,50V,GP,10X12.5,5MM,T		
RF3,4	3601-000263	FUSE-FERRULE;250V,3.15A,TIME LAG,GL		14709-241-280
RF3,4/HOLDER	3602-000147	FUSE-CLIP;250V,7.5A,30MOHM		13164-101-913
PSCW1	3711-000190	CONNECTOR-HEADER;1WALL,2P,1R,7.92MM		13349-156-020
RCW1	3711-000586	CONNECTOR-HEADER;BOX,10P,1R,2.5MM,A		A6010-0388
RCW2	3711-000814	CONNECTOR-HEADER;BOX,2P,1R,2.5MM,AN		13349-511-573
VCW1	3711-000988	CONNECTOR-HEADER;BOX,5P,1R,2.0MM,AN		13349-139-050
VCW2	3711-001009	CONNECTOR-HEADER;BOX,5P,1R,2.5MM,AN		13349-511-547
VQ1	6003-000275	SCREW-TAPTITE;BH,+,B,M3,L10,BLK ,SW		17458-230-103
PL1,2	AH27-10001F	COIL-CHOKE;27UH,K,Q30,-,-,DR(6.5*7.		12429-010-330
VQ1	AH62-30060A	HEAT SINK-CD;AL,-,T1.0,-,-,-,SCM-70		15684-505-820

Loc No.	New Code No.	Description	Specification	Old Code No.
AH90-40321H		**ASSY-OPT PCB POWER;MAX460V,220V CP2**		
RF1	3601-000162	FUSE-FERRULE;250V,1.25A,TIME LAG,GL		14709-241-220
RF1	3602-000147	FUSE-CLIP;250V,7.5A,30MOHM		13164-101-913
P/T	AH26-80140X	TRANS-POWER;EI74X52,220V,50HZ,MAX46		
POWER-CORD	AH39-10002L	POWER CORD;CP2,KLCE-2F,2.15M,5239,V		A6006-0187
POWER-CORD(OPTION)	AH39-10002G	POWER CORD;CP,VCTFK-0.75X2,1.8M,5239,KS		
AH90-10667C		**ASSY-PCB VCD;MAX-633V,NT/PAL**		
CZD1	0403-000344	DIODE-ZENER;UZ3.9B,3.9V,3.7-4.1V,50		12169-403-490
OD1	0407-000101	DIODE-ARRAY;DA204K,20V,100MA,C2-3,S		A4100-0032
EQ2,OQ2,3	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150MW,SO		11139-801-022
OQ1,ALQ1,ARQ1	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200MW		11139-801-032
CQ1	0502-000425	TR-POWER;2SD2395-F,NPN,2W,TO-220FN,		B4052-0087
AQ2,EQ1	0504-000128	TR-DIGITAL;-,NPN,200MW,22K-22KOHM,S		11139-801-182
AQ1	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K-22		11139-801-101
CI2,3,OI3	0801-000305	IC-CMOS LOGIC;7SU04,INVERTER,SOP,5P		B4004-0199
AI1	1002-000169	IC-D/A CONVERTER;PCM1710U,16BIT,SOP		B4012-0381
VEI1	1002-000172	IC-D/A CONVERTER;KDA0408,8BIT,QFP,4		A4012-0308
RI3	1101-001010	IC-PROM;27C512,64KX8BIT,DIP,28P,600		
RI1	1105-000141	IC-DRAM;416C256,256K*16BIT,SOJ,40P,		A4000-0083
ALI1,ARI1	1201-000163	IC-OP AMP;4560,SOP,8P,150MIL,DUAL,1		12119-401-300
PI1	1203-000194	IC-POSI.ADJUST REG.;78T05,TO-220,3P		12119-601-800
EI1	1204-000143	IC-ENCODER;MC13077,SOP,20P,-,PLASTI		B4012-0347
CI1	1204-000361	IC-DECODER;CL480,QFP,128P,-,PLASTIC		
OI1	1204-000378	IC-OSD PROCESSOR;KS5514B,DIP,24P,30		
RJ1,JW1	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		11119-101-000
ER6,7	2007-000221	R-CHIP;1.2KOHM,5%,1/10W,DA,TP,2012		11119-101-122
ALR2,ARR1	2007-000241	R-CHIP;1.5KOHM,5%,1/10W,DA,TP,2012		11119-101-152
OR10	2007-000267	R-CHIP;1.8KOHM,5%,1/10W,DA,TP,2012		11119-101-182
OR5,ALR10,ARR10	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012		11119-101-104
RR1,2,3,4,5	2007-000290	R-CHIP;100OHM,5%,1/10W,DA,TP,2012		11119-101-101
RR6,7,8,9,10				
RR11,12,13,PR1,ER11				
CR4,5,6,7,8				
CR9,10,13,14,15				
MR2,3,4,5,6				
CR16				
ER1,2,3,10,CR2	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012		11119-101-103
CR3,ALR6,ARR6				
OR3	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
ER4,5,12,OR4	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
CR12,ALR9,ARR9				
MR1,CR17,OPR1	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012		11119-101-105
OR2	2007-000565	R-CHIP;220KOHM,5%,1/10W,DA,TP,2012		11119-101-224
OR6,7,8,9,ER8	2007-000572	R-CHIP;220OHM,5%,1/10W,DA,TP,2012		11119-101-221
CR1	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012		11119-101-332
OR1,ALR1,3,ARR2,5	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
ER9,OR13	2007-000931	R-CHIP;470OHM,5%,1/10W,DA,TP,2012		11119-101-471
CR11	2007-000981	R-CHIP;5.6KOHM,5%,1/10W,DA,TP,2012		11119-101-562

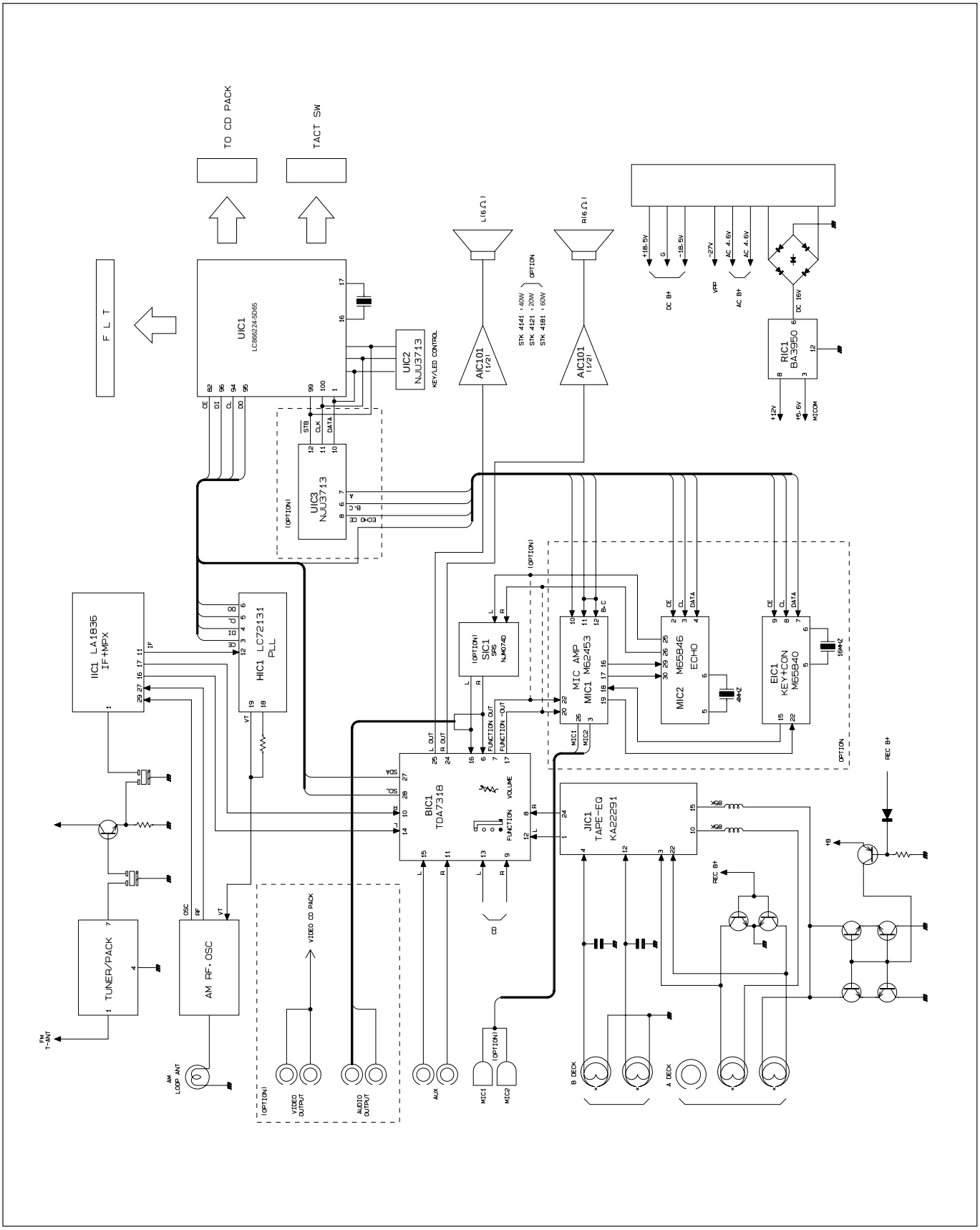
Loc No.	New Code No.	Description	Specification	Old Code No.
ALR8,ARR3	2007-001071	R-CHIP;6.8KOHM,5%,1/10W,DA,TP,2012		11119-101-682
OR11,12	2007-001166	R-CHIP;75OHM,5%,1/10W,DA,TP,2012		A1020-0121
ALR4,5,7,11,ARR4	2007-001239	R-CHIP;910OHM,5%,1/10W,DA,TP,2012		A1020-0132
ARR7,8,11				
CC3,4,5,7,8	2203-000206	C-CERAMIC,CHIP;100NF,10%,50V,X7R,20		11129-014-104
CC10,EC1,2,3,6				
EC10,AC2,VEC1,2,3				
GC1,3,4,RC1,2	2203-000206	C-CERAMIC,CHIP;100NF,10%,50V,X7R,20		11129-014-104
PC2,3,4,5,MC3				
RC3,OC8				
OC6	2203-000239	C-CERAMIC,CHIP;100PF,5%,50V,NPO,201		11129-009-101
EC4,7,8,9,OC1	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,201		11129-004-103
OC16,17				
CC1,2	2203-000295	C-CERAMIC,CHIP;10PF,5%,50V,NPO,2012		11129-009-100
ALC2,ARC2	2203-000323	C-CERAMIC,CHIP;12NF,10%,50V,X7R,201		11129-004-123
EC11	2203-000363	C-CERAMIC,CHIP;150PF,5%,50V,NPO,201		
EC5	2203-000408	C-CERAMIC,CHIP;180PF,5%,50V,NPO,201		11129-008-181
ALC3,ARC3	2203-000495	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,20		11129-004-222
MC1,2	2203-000555	C-CERAMIC,CHIP;20PF,5%,50V,NPO,2012		11129-009-200
OC5	2203-000609	C-CERAMIC,CHIP;22NF,10%,50V,X7R,201		11129-004-223
OC2,3	2203-001164	C-CERAMIC,CHIP;68PF,5%,50V,SL,2012,		
OC4	2203-001517	C-CERAMIC,CHIP;15PF,5%,50V,NPO,2012		
EC15	2203-001524	C-CERAMIC,CHIP;47PF,5%,50V,NPO,2012		
OC7,EC12,ALC6,ARC6	2203-001537	C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012		
ALC4,ARC4	2203-001551	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,20		
OC14,15,CC6,9,PC1	2401-000243	C-AL;100UF,20%,10V,GP,6.3*5,2.5MM,T		11608-152-101
AC1,EC13				
OC11	2401-000407	C-AL;10UF,20%,16V,GP,3.5*5,-,TP		11608-173-100
AC3,4	2401-000588	C-AL;1UF,20%,50V,GP,3*5,1MM,TP		11608-106-109
EC14	2401-000909	C-AL;22UF,20%,16V,GP,5*5,2MM,TP		11608-153-220
OC9	2401-001238	C-AL;4.7UF,20%,25V,GP,3*5,1MM,TP		11608-154-479
OC10	2401-001324	C-AL;470NF,20%,50V,GP,3*5,1MM,TP		11608-106-478
OC12,13	2401-002183	C-AL;220UF,0.2,16V,GP,8X9,5MM,TP		
RC4,ALC5,ARC5	2404-000190	C-TA,CHIP;22UF,20%,16V,-,5832,-,TP		11155-306-220
ALC1,ARC1	2404-000367	C-TA,CHIP;4.7UF,20%,6.3V,-,3216,-,		B1106-0274
OL1,2,EL1,AL1	2703-000001	INDUCTOR-SMD;10UH,10%,2.5X3.2X2MM		11176-600-050
CX1	2801-000286	CRYSTAL-UNIT;40.5MHZ,50PPM,28-AAM,2		A1280-0197
MX1	2802-000108	RESONATOR-CERAMIC;12MHZ,0.5%,BK,10.		14539-503-130
RB1,2,PB1,VB1	3301-000325	CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,		B1144-0034
RI3	3704-000241	SOCKET-IC;28P,DIP,SN,2.54MM		A3045-0018
SCON1	3708-001062	CONNECTOR-FPC/FC/PIC;30P,1.0MM,ANGL		
PCON1	3711-000903	CONNECTOR-HEADER;BOX,3P,1R,2.5MM,ST		13349-527-502
MI1	AH09-10061D	IC-MCU;LC865032A-XXXX,64P,QFP,8BITS		
SI1	AH14-10004T	IC-ANALOG M/PLEXER;MC14053BD,SOP,TA		
PCON1	AH39-20538A	LEAD CONNECTOR-ASSY;-,5051,5264,		
OI2	0801-001108	IC-CMOS LOGIC;4W53,MULTIPLEXER,SOP,		
GJ4,CJ1,RJ512,SJ1,2	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		11119-101-000
ALJ1,ARJ1,MPJ1,AMGL2				
ONR1	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012		11119-101-105
OPC1,ONC1	2203-001517	C-CERAMIC,CHIP;15PF,5%,50V,NPO,2012		

Loc No.	New Code No.	Description	Specification	Old Code No.
ONX1	2801-000155	CRYSTAL-UNIT;14.31818MHZ,50PPM,28-A		A1280-0199
OPX1	2801-000185	CRYSTAL-UNIT;17.734475MHZ,50PPM,28-		A1280-0122
SCON2	3711-000827	CONNECTOR-HEADER;BOX,2P,1R,2MM,STRA		13349-119-020
VCON1	3711-000968	CONNECTOR-HEADER;BOX,4P,1R,2MM,STRA		13349-119-040
VCON1	AH39-20546A	LEAD CONNECTOR-ASSY;-,51004,51004,4		
G3AC2-3/C		CD PACK ASSY;3-CD/CKD		
SUB-CD	3809-001016	CABLE-FLAT;30V,80C,150MM,26P,1.25MM		
FRONT-SUB	3809-001017	CABLE-FLAT;30V,80C,250MM,32P,1.25MM		
AH90-10476C		ASSY-PCB,SUB;MAX-630V,		19129-0328-06
SZD1	0403-000352	DIODE-ZENER;UZ4.7BM,4.7V,4.4-5.0V,5		12169-403-200
SZD2,3	0403-000361	DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24		12169-404-800
SIC1,2,3	1003-000298	IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,		
SR1	2001-000028	R-CARBON(S);100OHM,5%,1/2W,AA,TP,2.		11018-377-101
SR3,4,5,6	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.		11018-877-102
SR2	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X		11018-877-472
SC7,8,9	2201-000163	C-CERAMIC,DISC;10NF,+80-20%,50V,Y5V		11417-344-103
SC1,2,3,11,12	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5		
SC4	2401-000240	C-AL;100UF,20%,10V,GP,6*11MM,5MM,TP		11608-102-104
SC5,10	2401-000795	C-AL;220UF,20%,16V,GP,8X11.5,3.5MM,		
SC6	2401-001912	C-AL;1UF,20%,50V,GP,5X11MM,2MM,BK		
SL1	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM		
SCW1	3708-000265	CONNECTOR-FPC/FC/PIC;32P,1.25MM,ANG		B6013-0070
SCW2	3708-001031	CONNECTOR-FPC/FC/PIC;26P,1.25MM,ANG		
SCW5	3711-000988	CONNECTOR-HEADER;BOX,5P,1R,2.0MM,AN		13349-139-050
SCW6	3711-001525	CONNECTOR-HEADER;NOWALL,4P,1R,2.5MM		13349-167-040
SIC4	AC14-12001G	IC;KA78L05,T,-		
SCW3	AH39-20018R	LEAD-CONNECTOR ASS'Y;51004,35023,15		16439-0103-00
SCW7	AH39-20025U	LEAD-CONNECTOR,ASSY;-,51004-03,3502		16439-0293-00
SCW4	AH39-20507A	LEAD CONNECTOR-ASSY;-,51004,35023,1		
WZD02	0403-000363	DIODE-ZENER;UZ6.8BH,6.8V,6.8-7.2V,5		12169-403-690
WQ10	0501-000279	TR-SMALL SIGNAL;KSA1182-Y,PNP,150MW		11139-701-040
WQ2	0501-000323	TR-SMALL SIGNAL;KSB564Y,PNP,800MW,T		12149-202-050
WQ5	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO		
WIC03	1003-000179	IC-MOTOR DRIVER;KA9258D,SOP,28P,-,S		
WIC02	1204-000369	IC-ASP;CXD2500A/BQ,QFP,80P,-,PLASTI		
WIC01	1204-001041	IC-ASP;KA9220B,QFP,80P,-,PLASTIC,6V		
WJW1,2	2007-000029	R-CHIP;0OHM,5%,1/10W,DA,TP,2012		11119-101-000
AJW1,7,8,10,11,12,13				
AJW19				
WR1	2007-000068	R-CHIP;470KOHM,5%,1/10W,DA,TP,2012		11119-101-474
WR2,9,18	2007-000282	R-CHIP;100KOHM,5%,1/10W,DA,TP,2012		11119-101-104
WR36,32	2007-000300	R-CHIP;10KOHM,5%,1/10W,DA,TP,2012		11119-101-103
WR12,16	2007-000338	R-CHIP;120KOHM,5%,1/10W,DA,TP,2012		11119-101-124
WR8,22,23,24	2007-000355	R-CHIP;12KOHM,5%,1/10W,DA,TP,2012		11119-101-123
WR3,33	2007-000395	R-CHIP;150KOHM,5%,1/10W,DA,TP,2012		11119-101-154
WR14	2007-000409	R-CHIP;15KOHM,5%,1/10W,DA,TP,2012		11119-101-153
WR5,29	2007-000444	R-CHIP;180KOHM,5%,1/10W,DA,TP,2012		11119-101-184
WR37	2007-000462	R-CHIP;18OHM,5%,1/10W,DA,TP,2012		11119-101-180

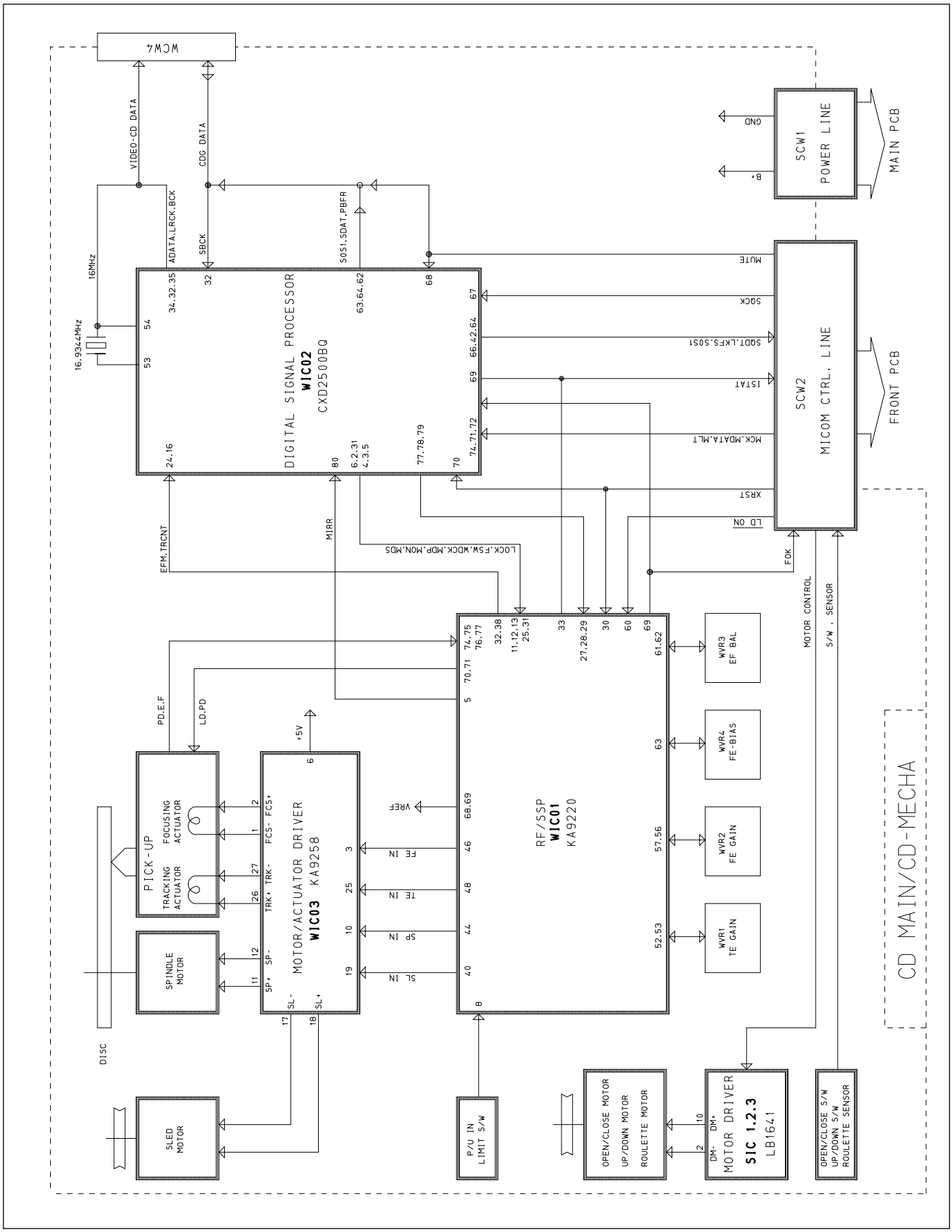
Loc No.	New Code No.	Description	Specification	Old Code No.
WR10,19,27,AWR1	2007-000468	R-CHIP;1KOHM,5%,1/10W,DA,TP,2012		11119-101-102
WR6	2007-000477	R-CHIP;1MOHM,5%,1/10W,DA,TP,2012		11119-101-105
WR34	2007-000586	R-CHIP;22KOHM,5%,1/10W,DA,TP,2012		11119-101-223
WR25	2007-000593	R-CHIP;22OHM,5%,1/10W,DA,TP,2012		11119-101-220
WR30,31	2007-000686	R-CHIP;3.3KOHM,5%,1/10W,DA,TP,2012		11119-101-332
AWR3	2007-000766	R-CHIP;330OHM,5%,1/10W,DA,TP,2012		11119-101-331
WR17	2007-000830	R-CHIP;39KOHM,5%,1/10W,DA,TP,2012		11119-101-393
WR21	2007-000872	R-CHIP;4.7KOHM,5%,1/10W,DA,TP,2012		11119-101-472
WR11,15	2007-000941	R-CHIP;47KOHM,5%,1/10W,DA,TP,2012		11119-101-473
WR13	2007-001039	R-CHIP;56KOHM,5%,1/10W,DA,TP,2012		11119-101-563
WR7	2007-001177	R-CHIP;8.2KOHM,5%,1/10W,DA,TP,2012		11119-101-822
WR4	2007-001195	R-CHIP;820KOHM,5%,1/10W,DA,TP,2012		11119-101-824
WR26	2007-001213	R-CHIP;82OHM,1%,1/10W,DA,TP,2012		11119-102-820
WR35	2008-000141	R-FUSIBLE;2.2OHM,5%,1/4W,AA,TP,2.6X		11058-277-229
WVR1,2,3,4	2103-000291	VR-SEMI;20KOHM,30%,1/10W,SIDE		11249-102-043
WC3,4,5,20,22,31,32,33 AC2,3,4	2203-000199	C-CERAMIC,CHIP;100NF,+80-20%,50V,Z5		
WC1,2,10,19,34,40,44	2203-000260	C-CERAMIC,CHIP;10NF,10%,50V,X7R,201		11129-004-103
WC13	2203-000417	C-CERAMIC,CHIP;18NF,10%,50V,X7R,201		11129-004-183
WC18,21	2203-000495	C-CERAMIC,CHIP;2.2NF,10%,50V,X7R,20		11129-004-222
WC7,28	2203-000802	C-CERAMIC,CHIP;33NF,10%,50V,X7R,201		11129-001-333
WC35,36	2203-000818	C-CERAMIC,CHIP;33PF,5%,50V,NPO,2012		11129-008-330
WC14	2203-000840	C-CERAMIC,CHIP;390PF,5%,50V,NPO,201		
WC23	2203-000892	C-CERAMIC,CHIP;4.7NF,10%,50V,X7R,20		
WC8,9,15	2203-000919	C-CERAMIC,CHIP;470NF,+80-20%,16V,Y5		
WC17,30	2203-000979	C-CERAMIC,CHIP;47NF,10%,50V,X7R,201		
WC24	2203-001026	C-CERAMIC,CHIP;4PF,0.25PF,50V,SL,20		
WC16	2203-001105	C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,20		11129-004-682
WC11	2203-001137	C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V		11129-004-683
WC25	2203-001256	C-CERAMIC,CHIP;8PF,0.25PF,50V,NPO,2		
WC27	2203-001537	C-CERAMIC,CHIP;1NF,10%,50V,X7R,2012		
WC29	2203-001551	C-CERAMIC,CHIP;1.5NF,10%,50V,X7R,20		
WC26,AC1,5	2401-000243	C-AL;100UF,20%,10V,GP,6.3*5,2.5MM,T		11608-152-101
WC12	2401-000419	C-AL;10UF,20%,16V,GP,5X11,5,-		
WC39	2401-000778	C-AL;220UF,20%,10V,GP,6.3X11,2.5MM,		11608-102-224
WC37,38	2401-001934	C-AL;220UF,20%,6.3V,GP,6.3X7,-,		A1104-0749
WC6	2404-000367	C-TA,CHIP;4.7UF,20%,6.3V,-,3216,-,		B1106-0274
XX1	2801-000176	CRYSTAL-UNIT;16.9344MHZ,50PPM,28-AA		14539-401-050
WB1,2 WB3,4,5,6,7,8	3301-000325	CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,		B1144-0034
WSW1	3409-000174	SWITCH-LEAF;16VDC,500MA,10GF,SPST		13564-601-100
WCW3	3708-000177	CONNECTOR-FPC/FC/PIC;16P,1.0MM,ANGL		A6010-1523
WCW2	3708-001032	CONNECTOR-FPC/FC/PIC;26P,1.25MM,ANG		
WCW4	3708-001062	CONNECTOR-FPC/FC/PIC;30P,1.0MM,ANGL		
WCW1	3711-000713	CONNECTOR-HEADER;BOX,15P,1R,2.0MM,A		A6010-0524
WCW6	3711-000826	CONNECTOR-HEADER;BOX,2P,1R,2MM,ANGL		13349-139-020
	3809-000202	CABLE-FLAT;30V,80C,82MM,16P,1MM,UL2		A6032-0066
CD-VCD	AH39-20545A	LEAD CONNECTOR-ASSY;-,51004,51004,2		
CENTER HOLE OF WQ4	AH39-50001L	LEAD-FASTEN;RING,1007#24,200MM,BLK		13059-201-203
WIC03	AH62-30047A	HEAT SINK;ETHD,-,T0.5,-,-,-,MAX-555		11124-0061-00

9. Block Diagrams

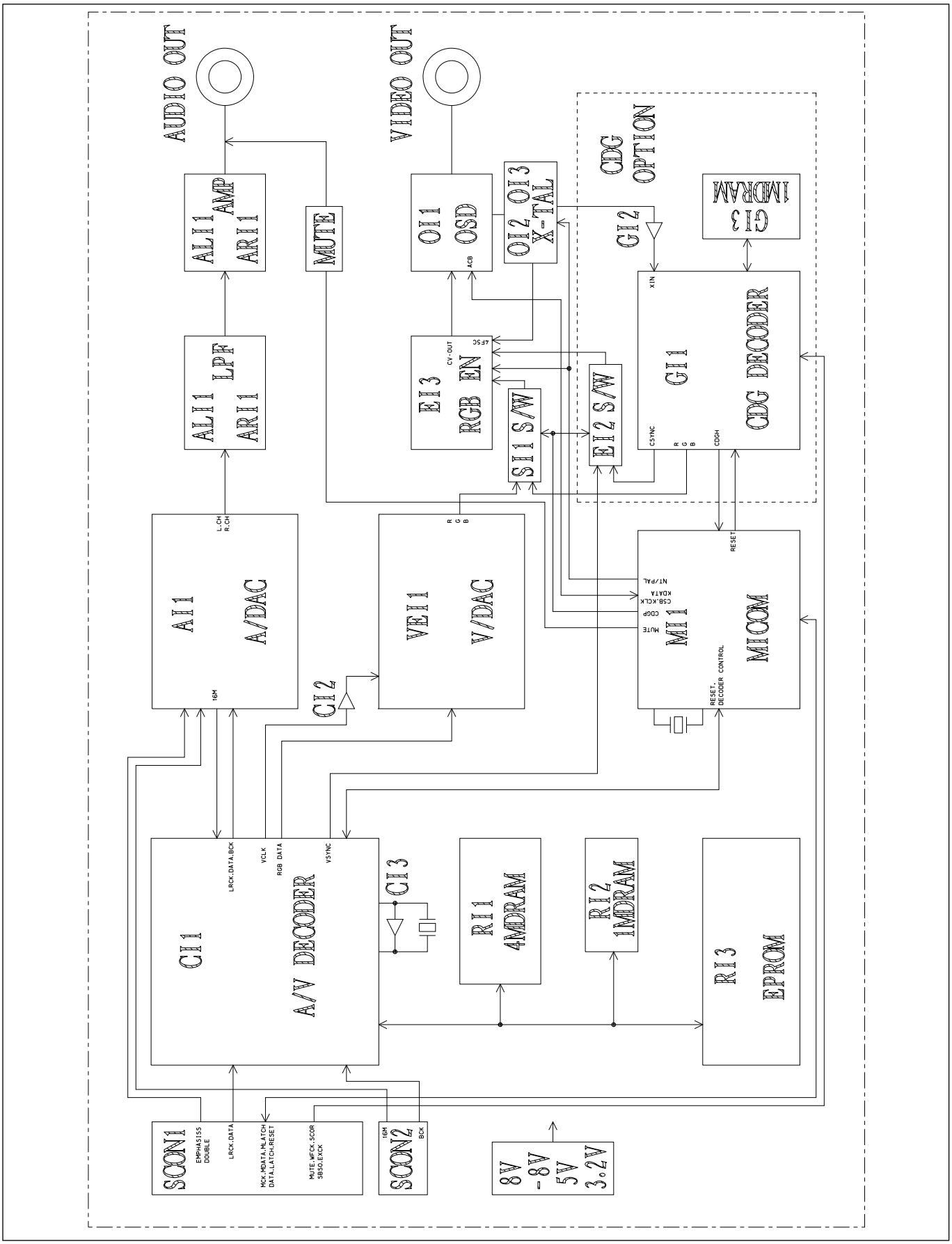
9-1 Main



9-2 CD


WCW4
VIDEO-CD DATA
CDG DATA
ADATA.LRCK.BCK
SBCK
SOSI.SDAT.PBFR
16MHz
16.9344MHz
DIGITAL SIGNAL PROCESSOR
WIC02
CXD2500BQ
MUTE
SOCK
SODT.LKFS.SOSI
ISTAT
MCK.MDATA.MLT
XRST
LD ON
SCW1
POWER LINE
GND
B+
MAIN PCB
SCW2
MICOM CTRL. LINE
FRONT PCB
EFM.TRONT
MIRR
LOCK.FSW.WDCK.MDP.MON.MDS
FOK
MOTOR CONTROL
S/W . SENSOR
RF/SSP
WIC01
KA9220
WVR3
EF BAL
WVR4
FE-BIAS
WVR2
FE GAIN
WVR1
TE GAIN
PD.E.F
LD.PD
+5V
VREF
FE IN
TE IN
SP IN
SL IN
PICK-UP
FOCUSING ACTUATOR
TRACKING ACTUATOR
MOTOR/ACTUATOR DRIVER
WIC03
KA9258
SPINDLE MOTOR
SLED MOTOR
DISC
P/U IN LIMIT S/W
OPEN/CLOSE MOTOR
UP/DOWN MOTOR
ROULETTE MOTOR
MOTOR DRIVER
SIC 1.2.3
LB1641
OPEN/CLOSE S/W
UP/DOWN S/W
ROULETTE SENSOR
CD MAIN/CD-MECHA

9-3 Video CD


AUDIO OUT
VIDEO OUT
ALI1 AMP ARI1
MUTE
OI1 OSD
OI2 OI3 X-TAL
CDG OPTION
GI2
GI3 1MDRAM
ALI1 LPR ARI1
EI3 RGB EN
SI1 S/W
EI2 S/W
GI1 CDG DECODER
AI1 A/DAC
VEI1 V/DAC
CI2
MI1 MICOM
CI1 A/V DECODER
CI3
RI1 4MDRAM
RI2 1MDRAM
RI3 EPROM
SCON1
SCON2
8V
-8V
5V
3.2V

9-4 LC866224 : UIC1

No.	Port	Name	I/O	Description
1	P5 2	MIC	O	MIC ON/OFF
2	PWM 1	MUTE	O	MUTE
3	P2 0	SD	I	SD
4	1	SD-L	I	SD-LED
5	2	POWER	O	POWER CONTROL
6	3	DUBB	I	H-DUBBING IN(TAPE)
7	4	DO	O	LC72131, TDA7318, M65846,M65840
8	5	CLK	O	LC72131, TDA7318, M65840,M65846
9	6	DI	I	LC72131 DATA INPUT
10	7	CE	O	LC72131 (PLL) CE
11	TEST		O	TEST PIN
12	RES		I	RESET INPUT
13	XT 1		I	SUB OSC (32.768KHz)
14	XT 2		O	SUB OSC (32.768KHz)
15	VSS		I	GND
16	CF 1		I	OSC INPUT (12MHz)
17	CF 2		O	OSC OUTPUT
18	VDD		I	POWER
19	P8 0	KEY 1	I	A/D KEY INPUT 1
20	1	KEY 2	I	A/D KEY INPUT 2
21	2	KEY 3	I	A/D KEY INPUT 3 (OPTION)
22	3	KEY 4	I	A/D KEY INPUT 4 (OPTION)
23	4	JOG 21	I	JOG IN
24	5	JOG 22	I	JOG IN
25	6	NAR	I	LEVEL A
26	7	EQ IN	I	LEVEL B
27	P7 0	SCOR	I	POWER SENSE
28	1	SENS	I	CD TRAY SENSE
29	2	SENS	I	SCOR INTERRUPT
30	3	REMO	I	REMOCON INPUT
31	S 0	DISC2	O	DISC2 LED
32	1	DISC3	O	DISC3 LED
33	2	G3	O	VFD CONTROL
34	3	G4	O	"
35	4	G5	O	"
36	5	G6	O	"
37	6	G7	O	"
38	7	G8	O	"
39	8	G9	O	"
40	9	G10	O	"
41	10	G11	O	"
42	11	G12	O	"
43	12	G13	O	"
44	13	G14	O	"
45	14	G15	O	"
46	15	G16	O	"
47	VDVP	+5.6V		
48	VP	-30V	O	VFD PINCH OFF VOLTAGE
49	S 16	S1	O	VFD CONTROL

No.	Port	Name	I/O	Description
50	S 17	S2	O	VFD CONTROL
51	18	S3	O	"
52	19	S4	O	"
53	20	S5	O	"
54	21	S6	O	"
55	22	S7	O	"
56	23	S8	O	"
57	24	S9	O	"
58	25	S10	O	"
59	26	S11	O	"
60	27	S12	O	"
61	28	S13	O	"
62	29	S14	O	"
63	30	S15	O	"
64	31	S16	O	"
65	P0 0	OPTION	I	TUNER, CD/VIDEO-CD
66	1	U/D SW	I	V10 UP/DOWN SW
67	2	FOK	I	FOCUS OK
68	3	LKFS	I	GFS
69	4	MLT	O	DSP/SSP CONTROL LATCH
70	5	MDATA	O	DSP/SSP CONTROL DATA
71	6	MCK	O	DSP/SSP CONTROL CLOCK
72	7	DOWN	O	DOWN MOTOR
73	P1 0	UP	O	UP MOTOR
74	1	SUBQ	I	SUBQ DATA
75	2	SQCK	O	SUBQ RECEIVE CLOCK
76	3	MUTE	O	DSP MUTE
77	4	OPEN	O	OPEN MOTOR
78	5	CLOSE	O	CLOSE MOTOR
79	6	RL M-	O	ROULETTE MOTOR -
80	7	RL M+	O	ROULETTE MOTOR +
81	P3 0	ISTAT	I	SENSE
82	1	LD_XPS	O	LD ON + XRST
83	2	JOG11	I	JOG VOLUME 1
84	3	JOG12	I	JOG VOLUME 2
85	4	CLATCH	I	LATCH (MAIN ← VIDEO CD)
86	5	CDATA	I	DATA (MAIN ← VIDEO CD)
87	6	V CLK	I	CLOCK (MAIN ← VIDEO CD)
88	7	V DATA	O	DATA (CD → VCD)
89	VSS	VSS		POWER PORT
90	VDD	VDD		POWER PORT
91	P4 0	V LATCH	O	LATCH (CD- VCD)
92	1	OPEN	O	OPEN SW
93	2	CLOSE	O	CLOSE SW
94	3	CE 23	O	NJU3713(OPTION) CE
95	4	CE 22	O	NJU3713 CE
96	5	DISC1	O	DISC 1 LED 1
97	6	SYNC	I	REC-IN (CD-SYNC)
98	7	CE 21	O	M65840 (KEY CON) LATCH
99	P5 0	DO 2	O	NJU3713, NJU3713 (O)
100	P5 1	CLK 2	O	NJU3713, NJU3713(O)

NJU3713 : UIC2

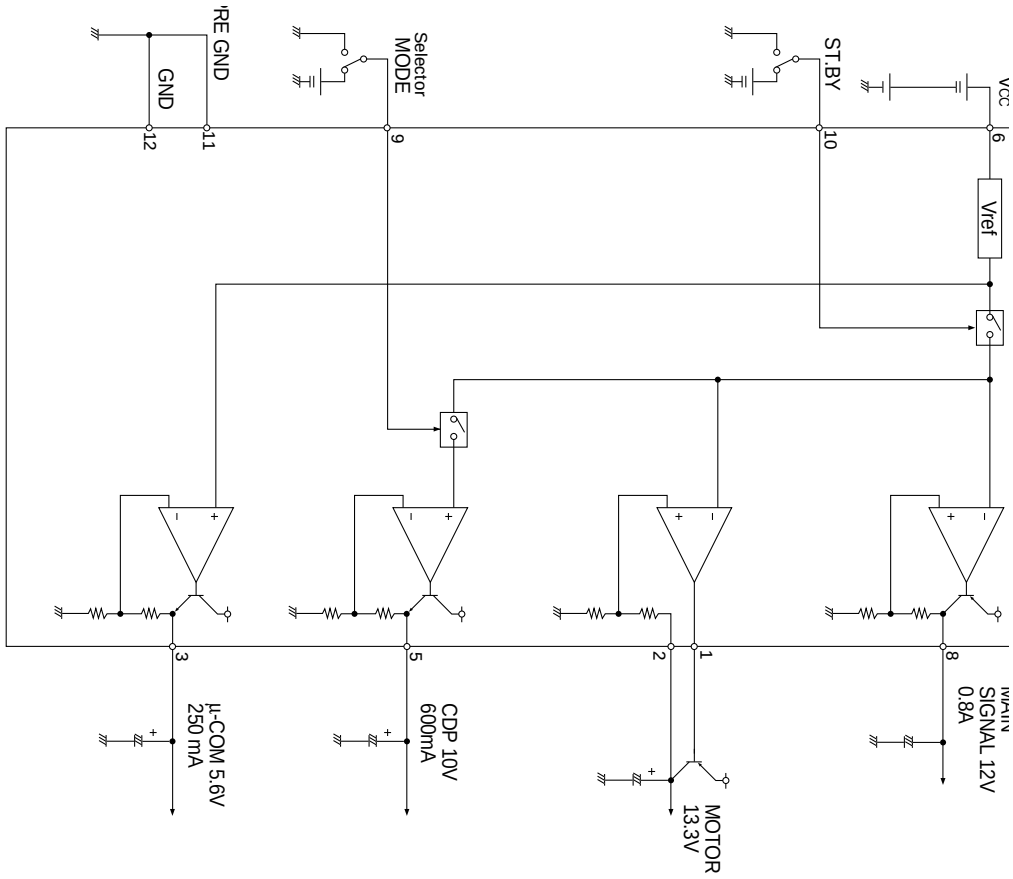
No.	Name	Description
1	P5	LED : SRS / MUTE
2	P6	LED : SBS / SALSA
3	P7	LED : PLAY/PAUSE
4	P8	LED : CD SKIP/BACK
5	VSS	
6	P9	LED : JOG
7	P10	SRS ON/OFF H : ON
8	P11	T-CTRL
9	P12	H-OUT
10	DATA	
11	CLK	
12	STB	
13	CLR	
14	P1	AUX
15	P2	TUNER
16	P3	TAPE
17	P4	CD
18	VDD	

NJU3713 : UIC3 (ECHO, KEY+CON OPTION)

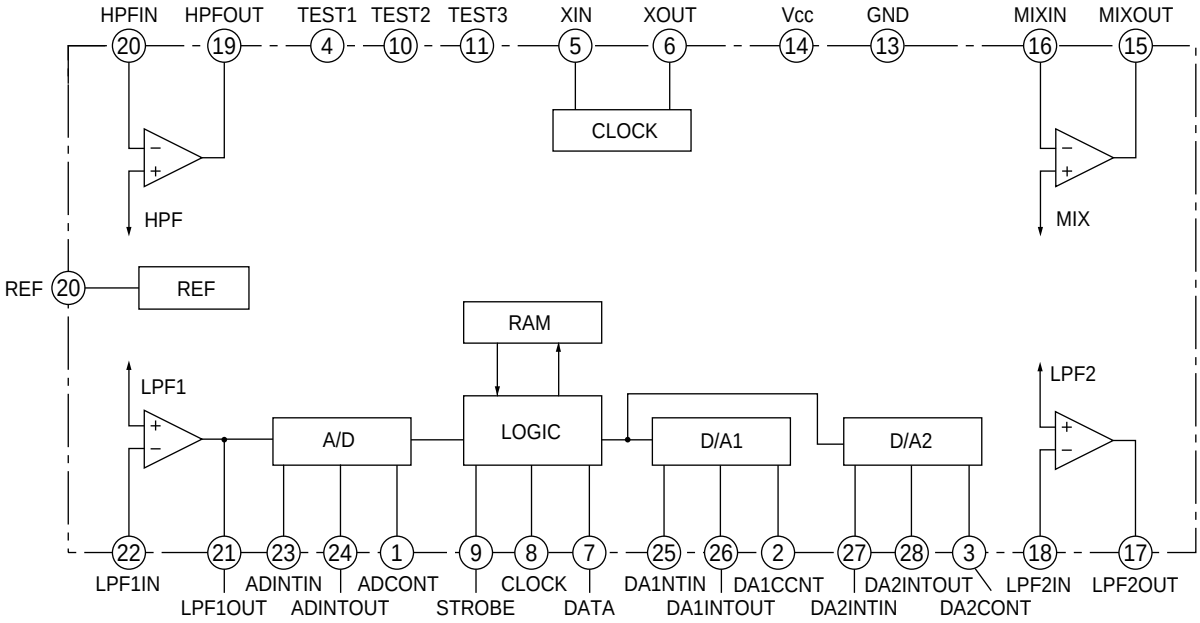
No.	Name	Description
1	P5	LED : VOICE CANCEL
2	P6	LED : "b"
3	P7	LED : "#"
4	P8	LED : ECHO ON/OFF
5	VSS	
6	P9	SW B, C (M62453)
7	P10	SW A (M62453)
8	P11	ECHO CE
9	P12	
10	DATA	
11	CLK	
12	STB	
13	CLR	
14	P1	RESET
15	P2	DOUBLE
16	P3	EMPHA
17	P4	SEL3
18	VDD	

9-5 IC & TR Internal Diagrams

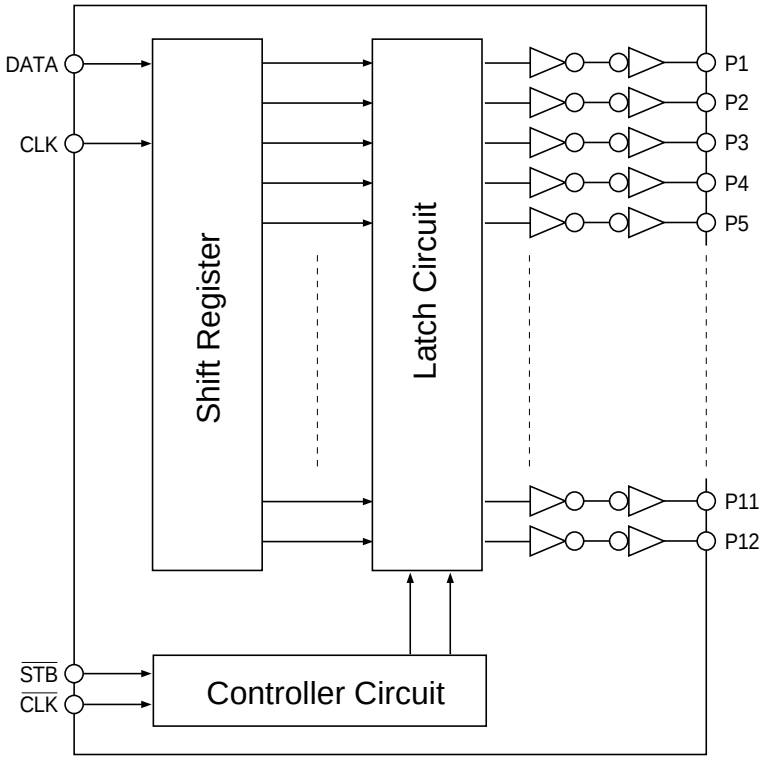
BA3950 : RIC1



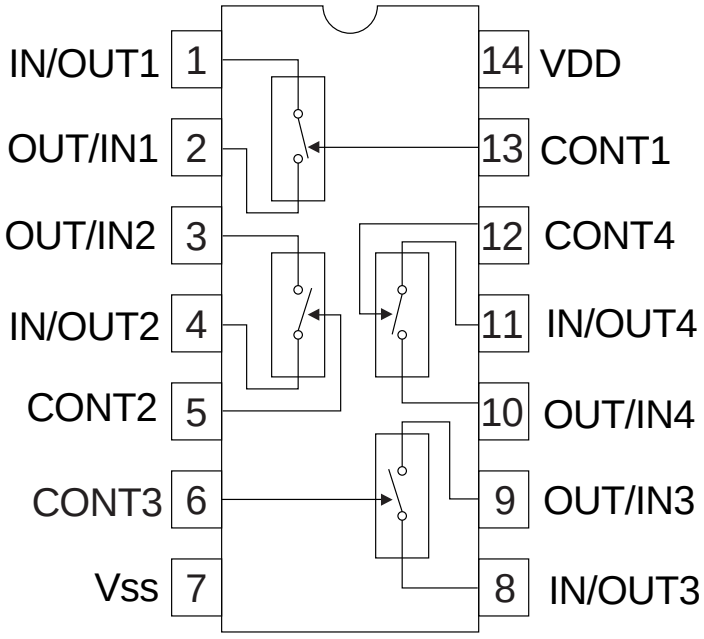
M65840 : EIC1 (OPTION KEY+CON)



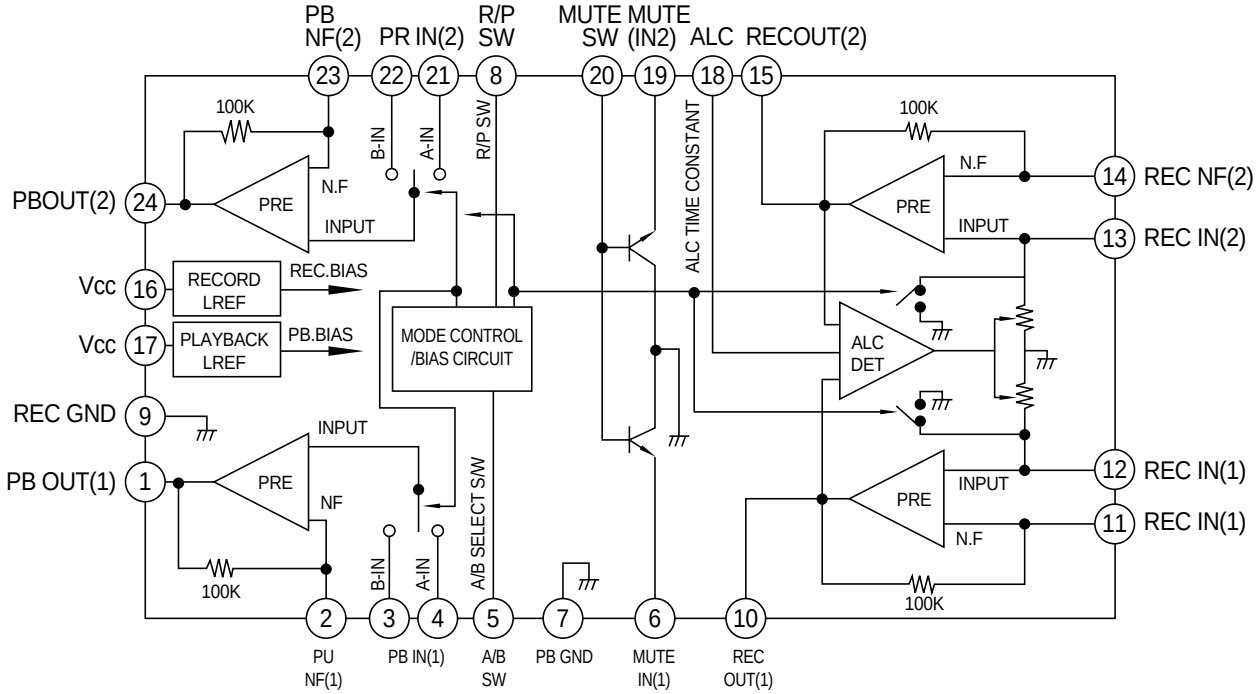
NJU3713 : UIC2, UIC3 (OPTION)



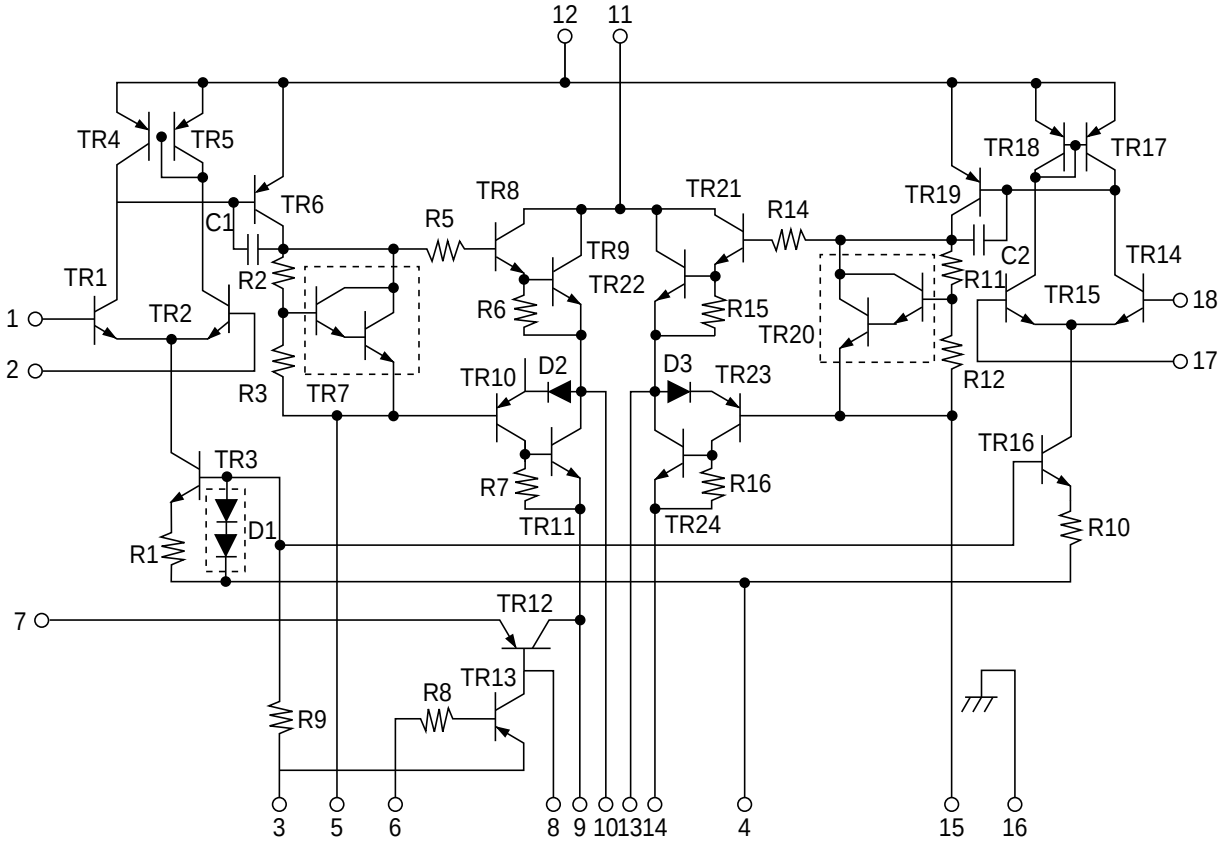
MC14066 : SIC3



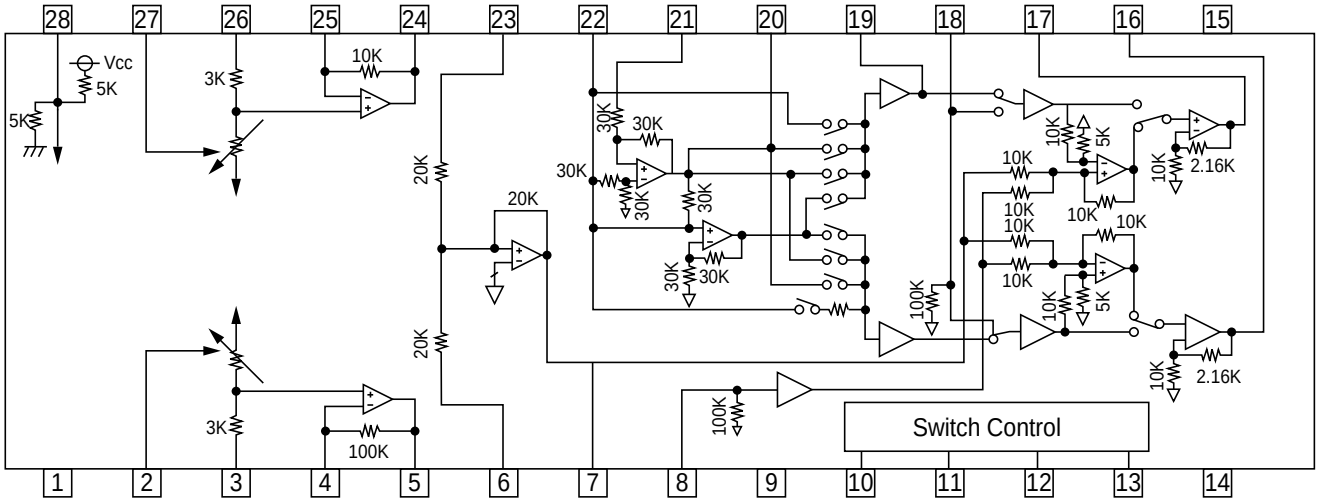
KA22291 : JIC1



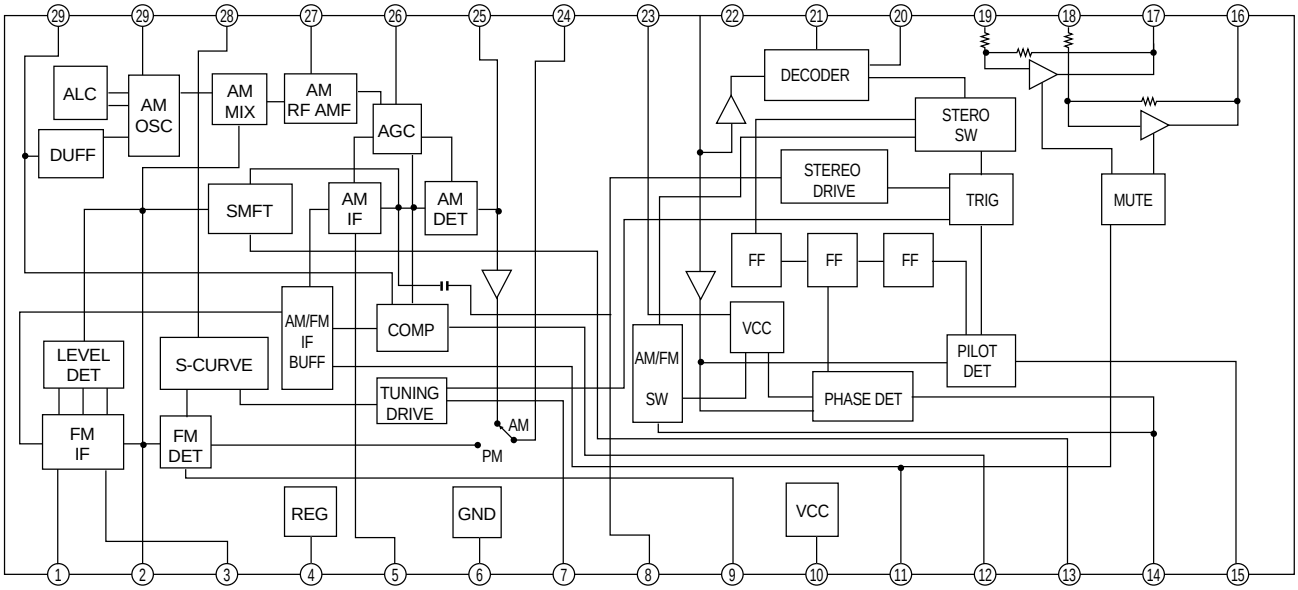
STK4121V (20W) : AIC101
STK4141V (40W) (OPTION)
STK4181V (60W) (OPTION)



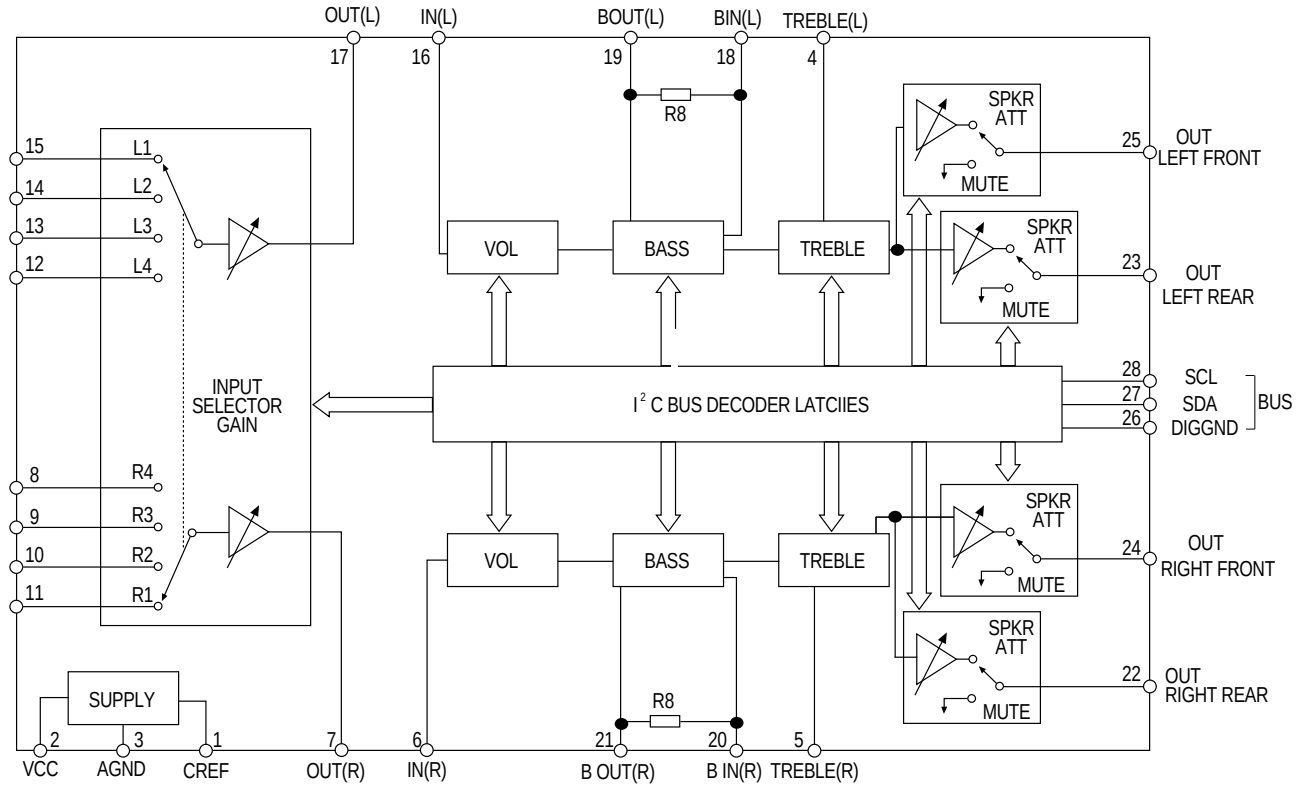
M62453SP : MIC1 (MIC OPTION)



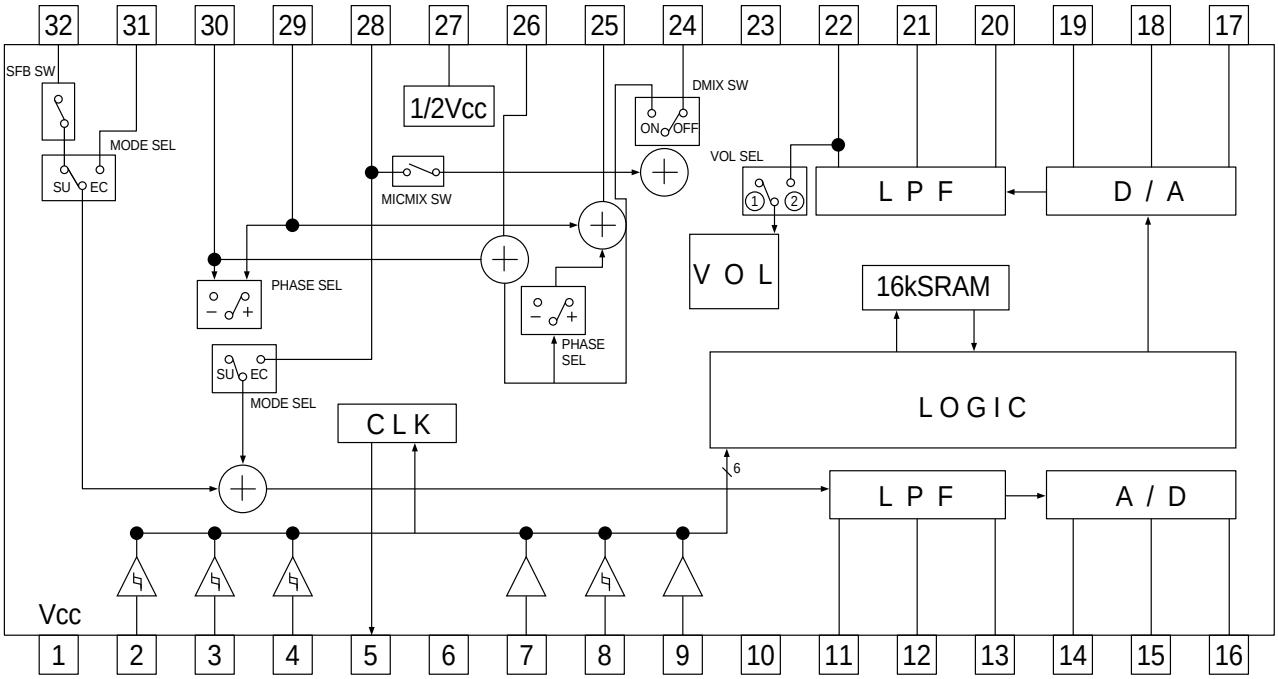
LA1836 : IIC1

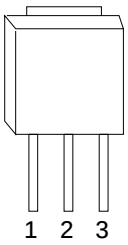


TDA7318 : BIC1



M65846FP : MIC2 (ECHO OPTION)

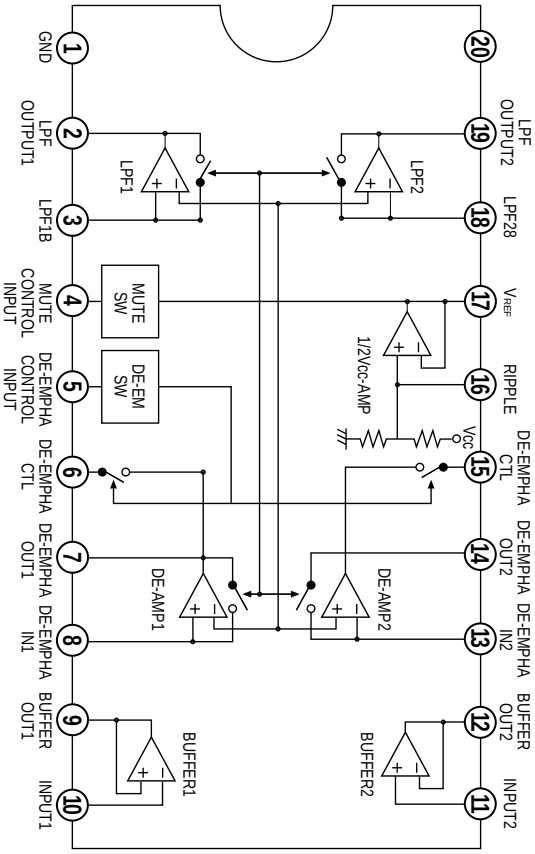




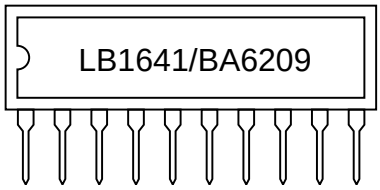
TR	1	2	3
KSR1003 A928	E	C	B

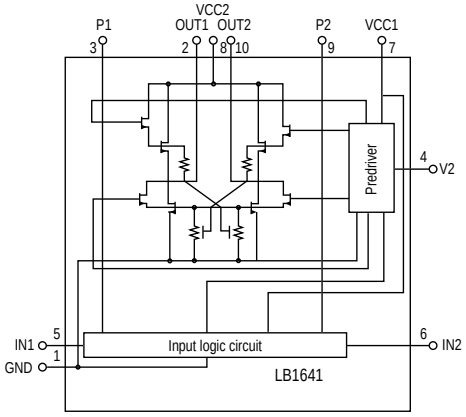
* NOTE : KSB564 ='EBC' TYPE

KA9270 : NIC9270

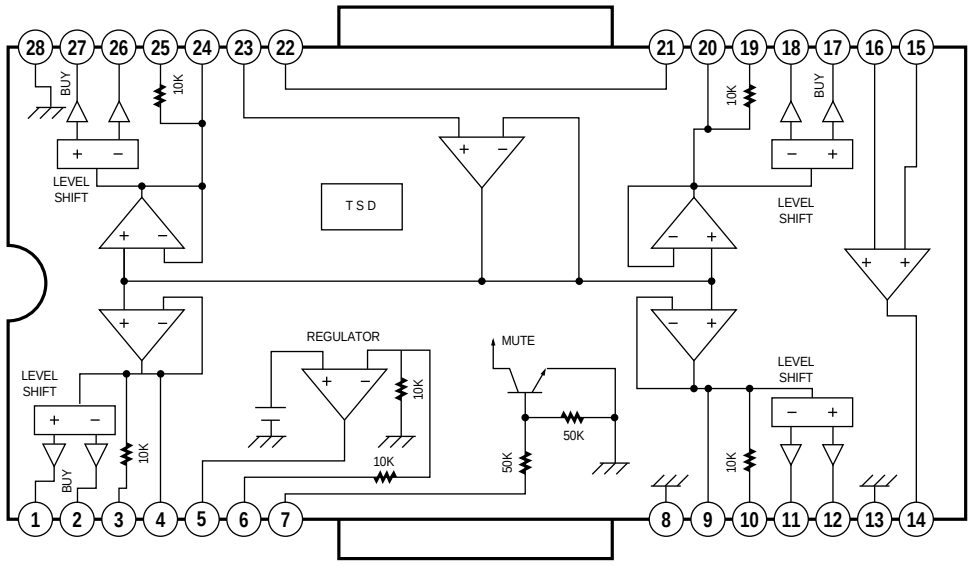


LB1641/BA6209(MOTOR DRIVER) : SIC1, SIC2,SIC3, NIC1641

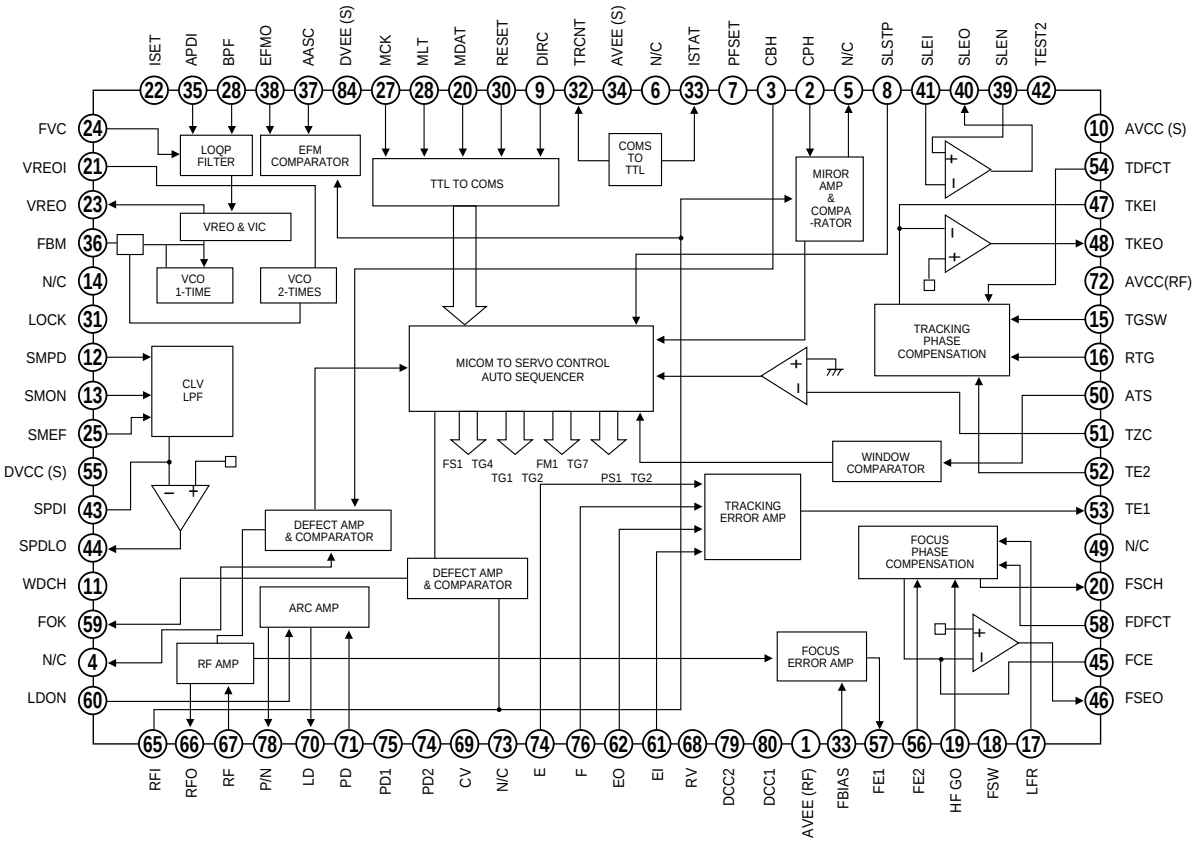




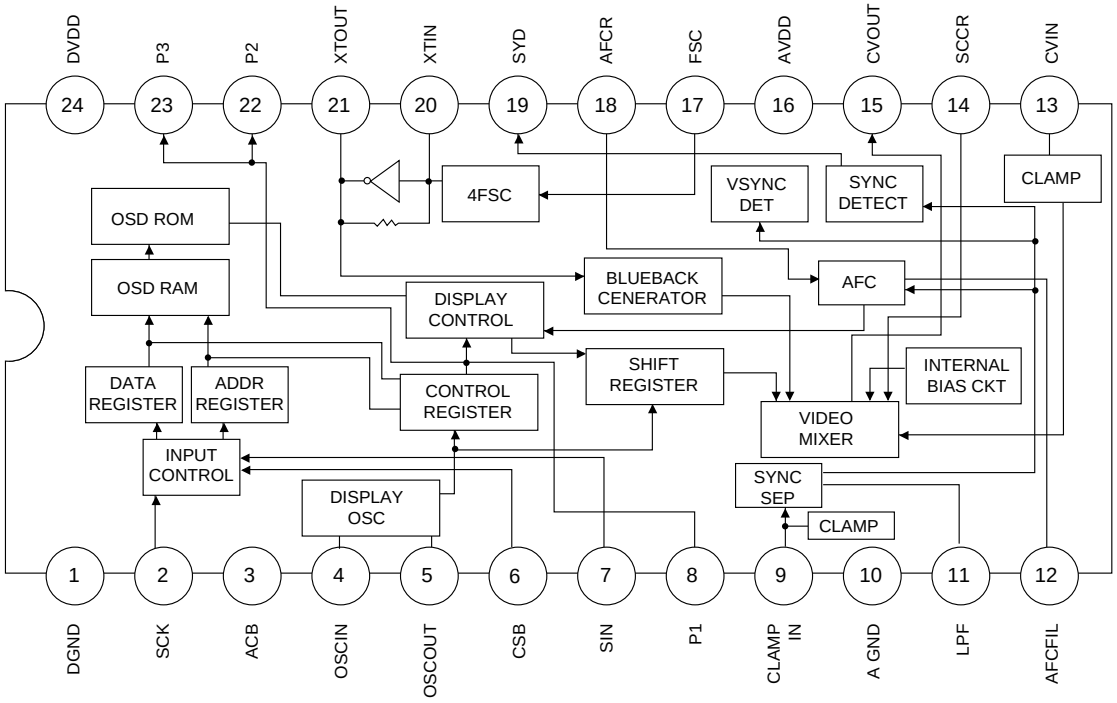
KA9258 : NIC9258



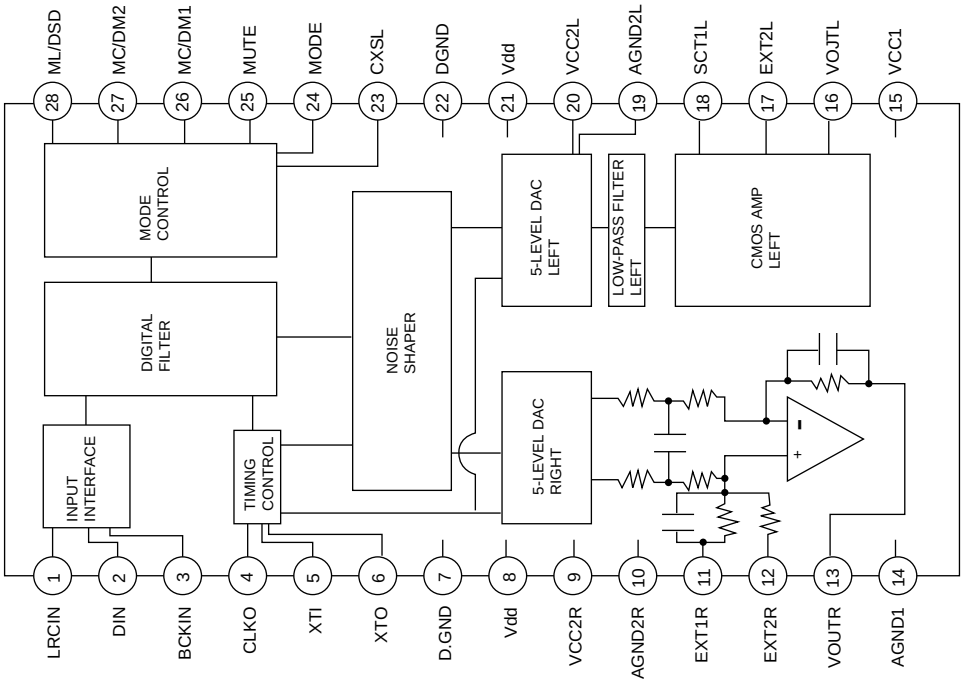
KA9220(ASSP) : NIC9220



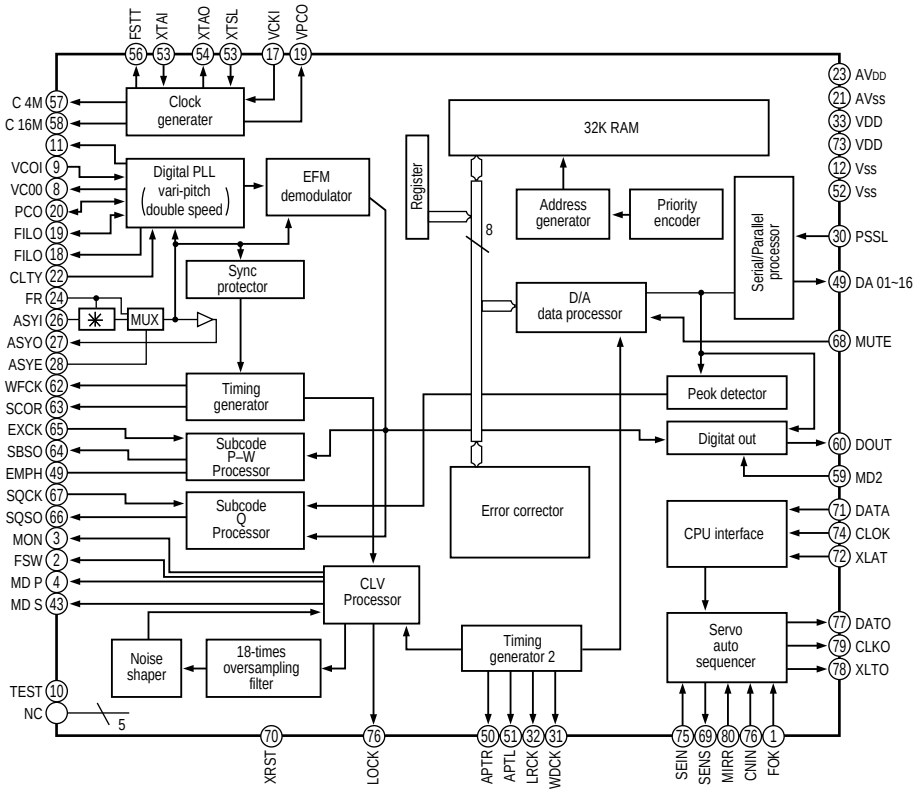
KS5514B-09 : OI1



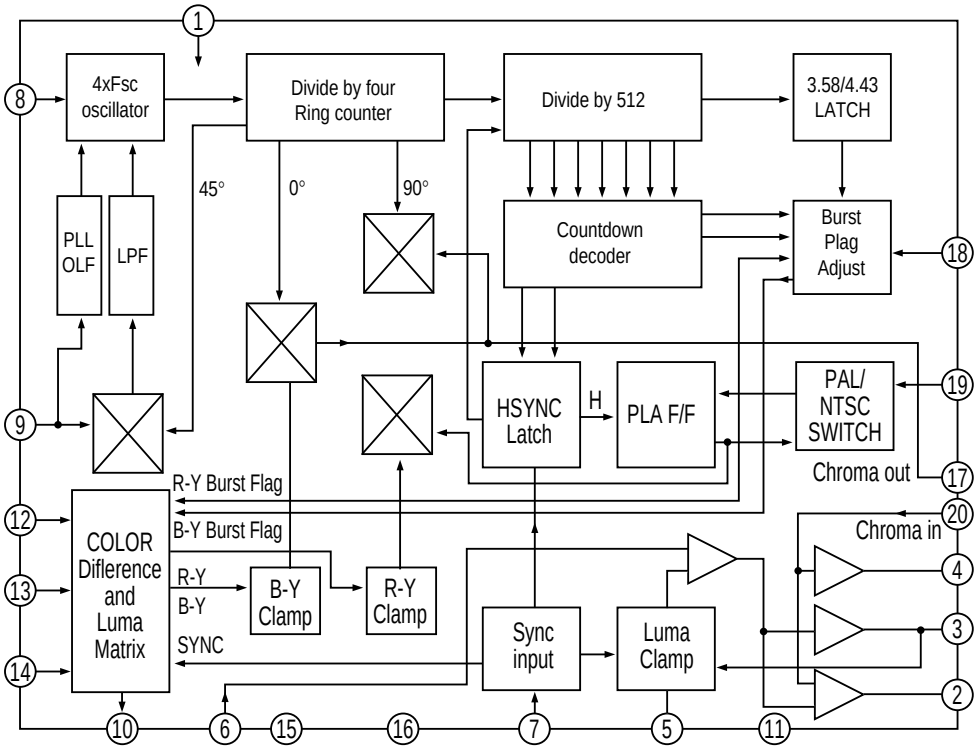
PCM1710U : AI1



CXD2500BQ :WIC02

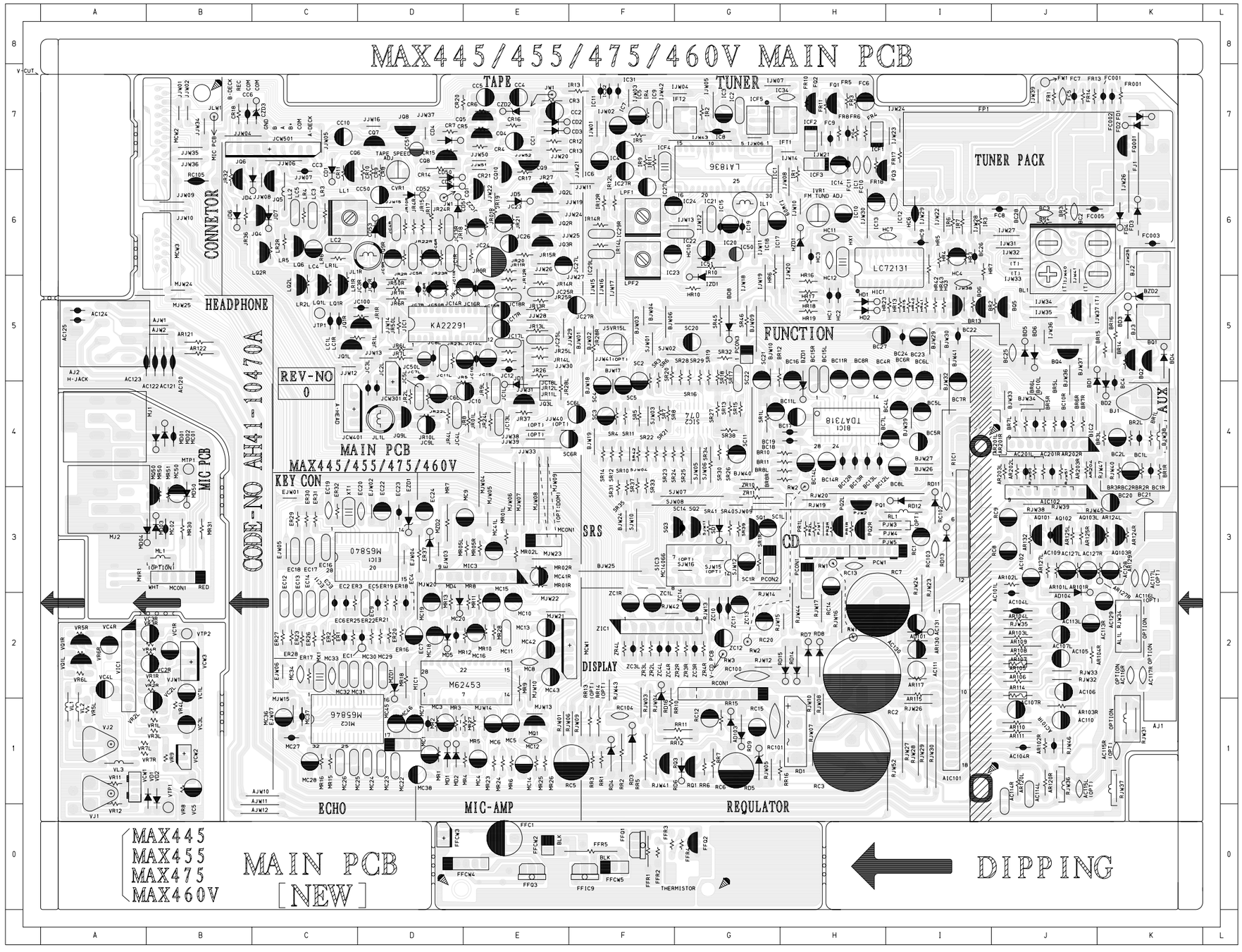


MC13077 : EI1



10. PCB Diagrams

10-1 Main



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AR104L (J2)
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ZR4L (F2)
ZR4R (G2)

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*** DIODE ***

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BD3 (K5)
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BD5 (J5)
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RD13 (I3)
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RD15 (H2)
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VD2 (B0)

*** TR ***

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FQ3 (I6)
HQ3 (I5)
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JQ2R (E6)
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JQ3R (E6)
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JQ9R (D6)
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LQ1R (C5)
LQ2L (C5)
LQ2R (C6)
LQ6 (C6)
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PQ2L (H3)
PQ2R (H3)
RQ1 (G1)
RQ3 (F1)
SQ1 (G3)
SQ2 (G3)
SQ3 (F3)
VQ1L (A2)
VQ1R (A2)

*** IC&WAFER ***

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FFCW3 (D0)
FFCW4 (E0)
FFCW5 (F0)
IFT1 (G7)
IFT2 (G7)
JCW301 (D4)
JCW401 (C4)
JCW501 (C7)
MCON1 (B3)
MCON1 (E3)
MCW1 (F2)
MIC3 (E3)
PCON1 (H3)
PCON2 (G3)
PCON3 (G5)
RCON1 (G2)
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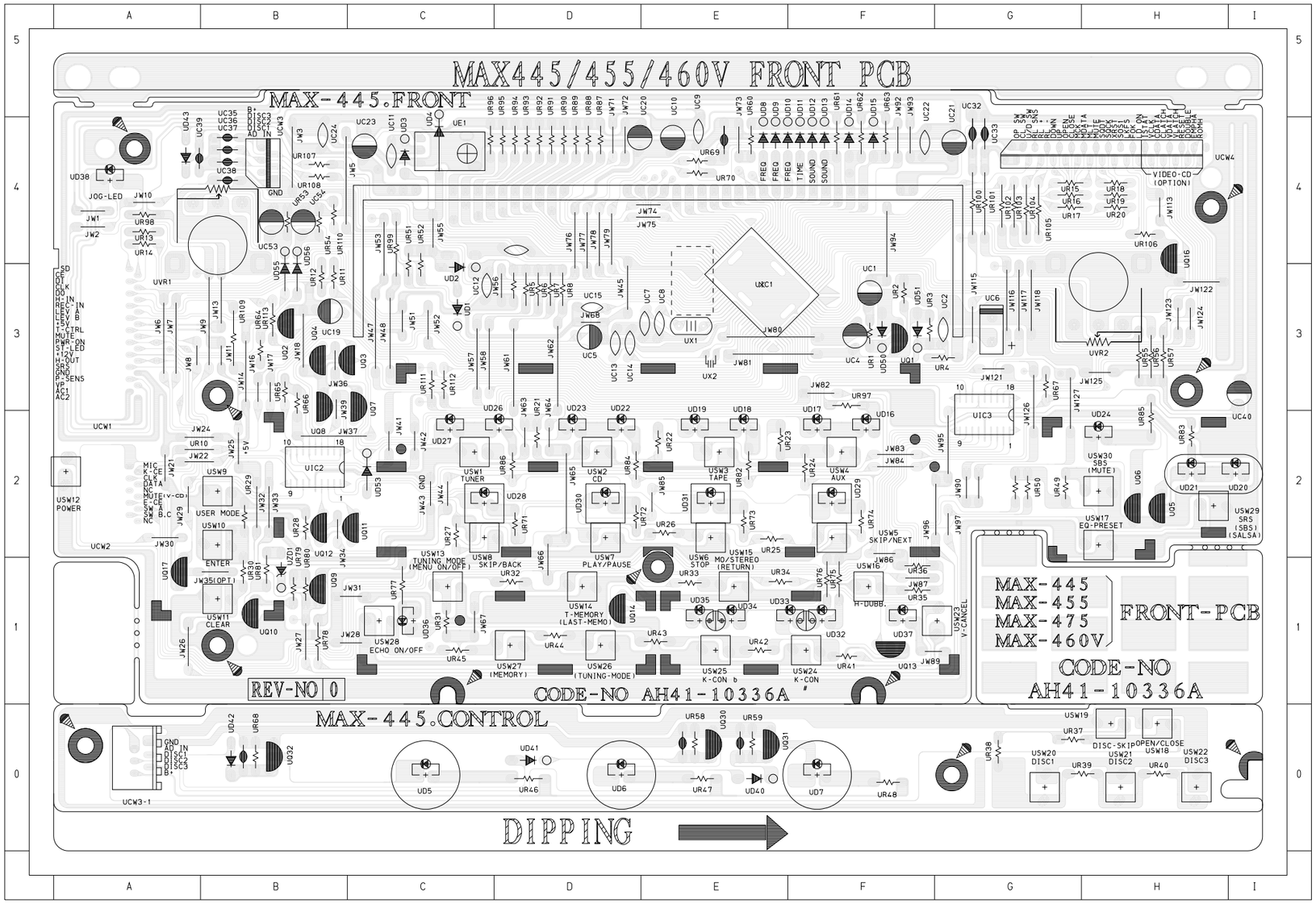
VCW3 (B2)
VIC1 (A2)
ZIC1 (F2)

*** CHIP ***

10-2 Front



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UR75 (F1)
UR76 (F1)
UR77 (C1)
UR78 (B1)
UR79 (B1)
UR8 (D3)
UR80 (B1)
UR81 (B1)
UR82 (E2)
UR83 (H2)
UR84 (D2)
UR85 (H2)
UR86 (D2)
UR87 (D4)
UR88 (D4)
UR89 (D4)
UR90 (D4)
UR91 (D4)
UR92 (D4)
UR93 (D4)
UR94 (D4)
UR95 (D4)
UR96 (C4)
UR97 (F3)
UR98 (A4)
UR99 (C3)

*** CONDENSER ***

UC1 (F3)
UC10 (E4)
UC11 (C4)
UC12 (C3)
UC13 (D3)
UC14 (D3)
UC15 (D3)
UC19 (B3)
UC2 (G3)
UC20 (D4)
UC21 (G4)
UC22 (F4)
UC23 (C4)
UC24 (B4)
UC32 (G4)
UC33 (G4)
UC35 (B4)
UC36 (B4)
UC37 (B4)
UC38 (B4)
UC39 (A4)
UC4 (F3)
UC40 (I3)
UC5 (D3)
UC53 (B4)
UC54 (B4)
UC7 (E3)
UC8 (E3)
UC9 (E4)

*** DIODE ***

UD1 (C3)
UD10 (F4)
UD11 (F4)
UD12 (F4)
UD13 (F4)
UD14 (F4)
UD15 (F4)
UD2 (C3)
UD3 (C4)
UD4 (C5)
UD40 (E0)
UD41 (D0)
UD42 (B0)
UD43 (A4)
UD50 (F3)
UD51 (F3)
UD53 (C2)
UD55 (B4)
UD56 (B4)
UD8 (E4)
UD9 (E4)
UZD1 (B1)

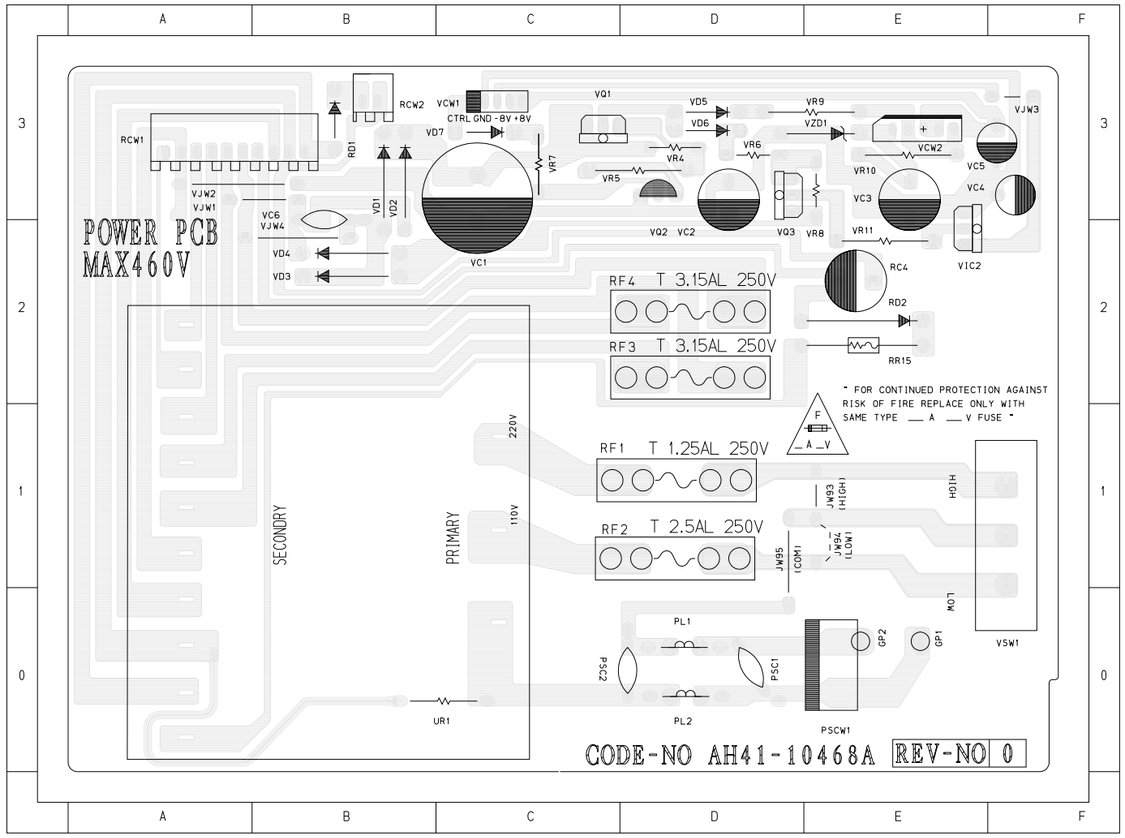
*** TR ***

UQ1 (F3)
UQ10 (B1)
UQ11 (C2)
UQ12 (B2)
UQ13 (F1)
UQ14 (D1)
UQ16 (H3)
UQ17 (A1)
UQ2 (B3)
UQ3 (C3)
UQ30 (E0)
UQ31 (E0)
UQ32 (B0)
UQ4 (B3)
UQ5 (H2)
UQ6 (H2)
UQ7 (C3)
UQ8 (B3)
UQ9 (B1)

*** IC&WAFER ***

UC6 (G3)
USW1 (C2)
USW10 (B2)
USW11 (B1)
USW12 (A2)
USW13 (C1)
USW14 (D1)
USW15 (E1)
USW16 (F1)
USW17 (H2)
USW18 (H0)
USW19 (H0)
USW2 (D2)
USW20 (G0)
USW21 (H0)
USW22 (H0)
USW23 (G1)
USW24 (F1)
USW25 (E1)
USW26 (D1)
USW27 (D1)
USW28 (C1)
USW29 (H2)
USW3 (E2)
USW30 (H2)
USW4 (F2)
USW5 (F2)
USW6 (E2)
USW7 (D2)
USW8 (C2)
USW9 (B2)

10-3 Power



*** RESISTOR ***

RR15 (D2)
UR1 (B0)
VR10 (E3)
VR11 (E2)
VR4 (D3)
VR5 (C3)
VR6 (D3)
VR7 (C3)
VR8 (E3)
VR9 (D3)

*** CONDENSER ***

PSC1 (D0)
PSC2 (D0)
RC4 (E2)
VC1 (C3)
VC2 (D3)
VC3 (E3)
VC4 (F3)
VC5 (F3)
VC6 (B3)

*** DIODE ***

RD1 (B3)
RD2 (E2)
VD1 (B3)
VD2 (B3)
VD3 (B2)
VD4 (B2)
VD5 (D3)
VD6 (D3)
VD7 (C3)
VZD1 (E3)

*** TR ***

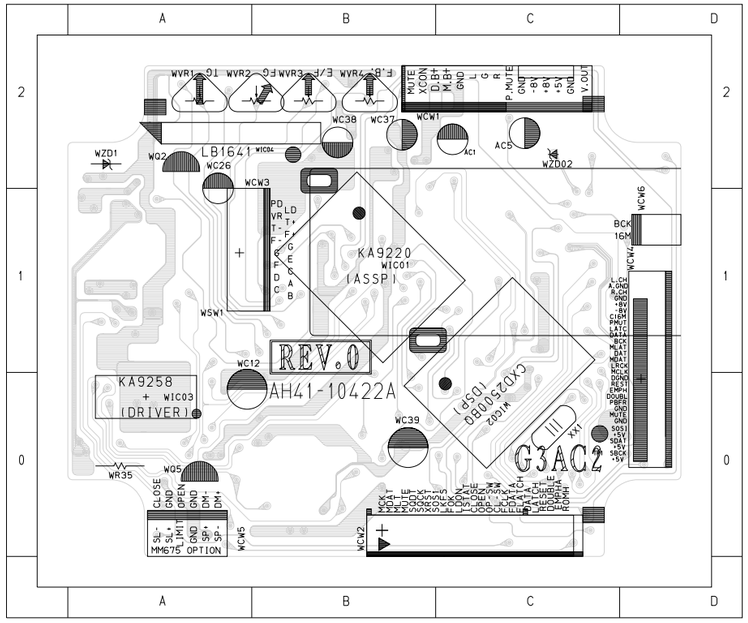
VQ2 (D3)

*** IC&WAFER ***

RCW1 (A3)
RCW2 (B3)
VCW1 (C3)
VCW2 (E3)
VSW1 (F1)

10-4 CD

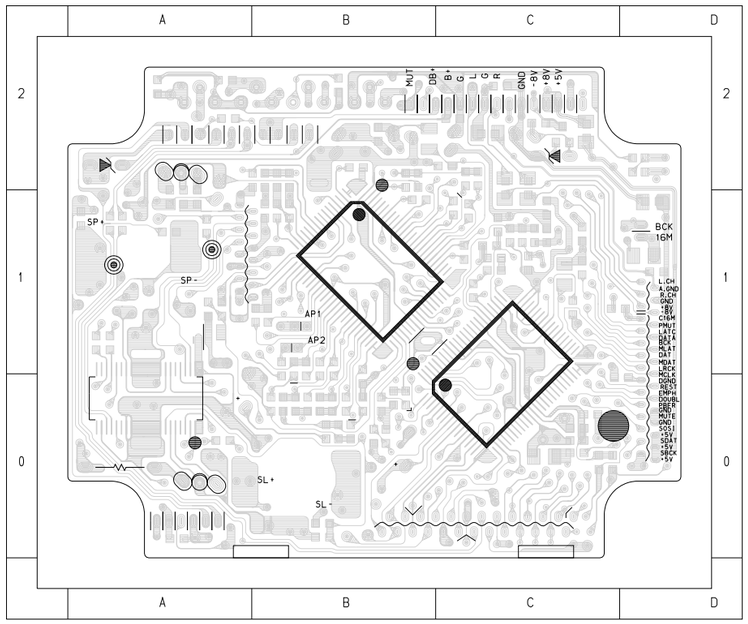
10-4-1 Top View



*** CHIP ***

AC2 (C1)	WB4 (D1)	WC31 (D2)	WR16 (B0)
AC3 (B2)	WB5 (D1)	WC32 (B0)	WR17 (B0)
AC4 (C2)	WB6 (C2)	WC33 (B0)	WR18 (B1)
AJW1 (A0)	WB7 (C2)	WC34 (C0)	WR19 (B1)
AJW10 (C1)	WB8 (C2)	WC35 (C0)	WR2 (A1)
AJW11 (D1)	WC1 (B2)	WC36 (C0)	WR21 (B2)
AJW12 (C0)	WC10 (B0)	WC4 (C2)	WR22 (B2)
AJW13 (C2)	WC11 (B0)	WC40 (A2)	WR23 (B2)
AJW14 (C2)	WC13 (B0)	WC44 (C0)	WR24 (B2)
AJW15 (C2)	WC14 (B0)	WC5 (C1)	WR25 (A1)
AJW16 (C2)	WC15 (B0)	WC6 (B2)	WR26 (A1)
AJW17 (C2)	WC16 (B0)	WC7 (C1)	WR27 (A1)
AJW18 (D1)	WC17 (B1)	WC8 (C1)	WR29 (C1)
AJW2 (A1)	WC18 (B1)	WC9 (B0)	WR3 (C2)
AJW3 (A1)	WC19 (A2)	WIC01 (B1)	WR30 (C1)
AJW4 (A1)	WC2 (B2)	WIC02 (C0)	WR31 (C1)
AJW5 (A1)	WC20 (B1)	WIC03 (A0)	WR32 (C1)
AJW6 (A0)	WC21 (A2)	WJW1 (B2)	WR33 (B1)
AJW7 (A1)	WC22 (B1)	WJW2 (A1)	WR34 (D2)
AJW8 (A1)	WC23 (B1)	WQ10 (C2)	WR36 (C0)
AJW9 (C1)	WC24 (B1)	WR1 (B1)	WR37 (D0)
AWR1 (C2)	WC25 (B1)	WR10 (B0)	WR4 (C2)
AWR2 (C1)	WC27 (A1)	WR11 (B0)	WR5 (C1)
AWR3 (C1)	WC28 (B2)	WR12 (B0)	WR6 (C1)
WB1 (C0)	WC29 (C1)	WR13 (B0)	WR7 (C1)
WB2 (C1)	WC3 (C1)	WR14 (B0)	WR8 (B0)
WB3 (C2)	WC30 (C1)	WR15 (B0)	WR9 (B0)

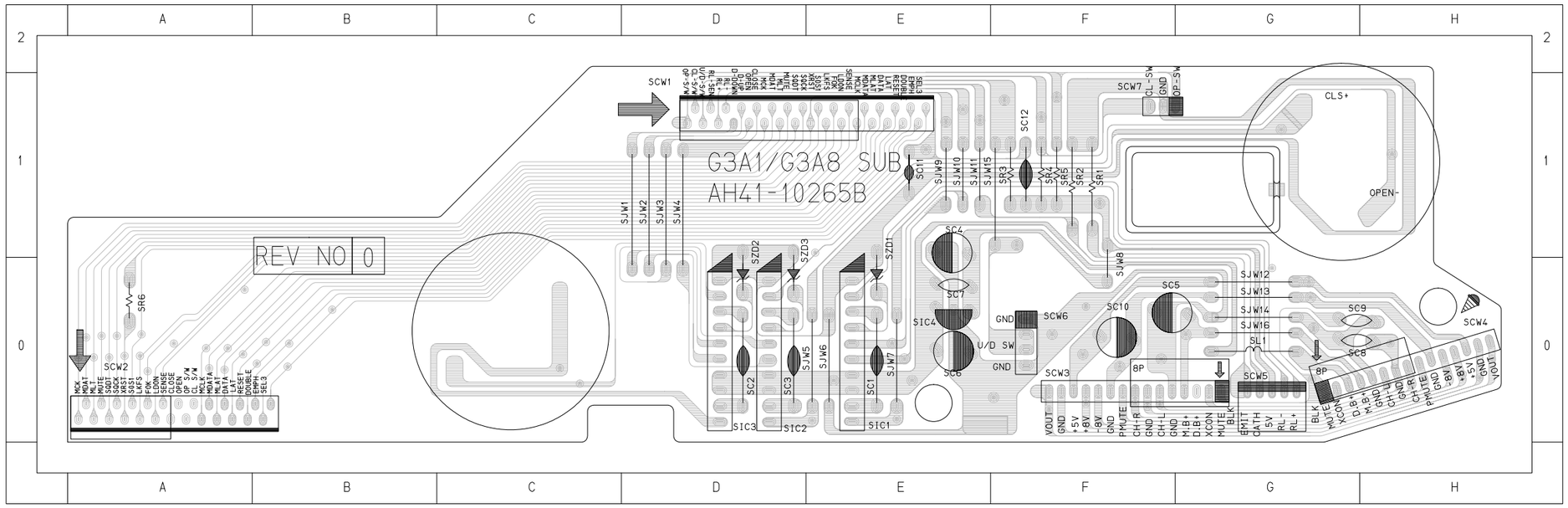
10-4-2 Bottom View



*** CHIP ***

AC2 (C1)	WB4 (D1)	WC31 (D2)	WR16 (B0)
AC3 (B2)	WB5 (D1)	WC32 (B0)	WR17 (B0)
AC4 (C2)	WB6 (C2)	WC33 (B0)	WR18 (B1)
AJW1 (A0)	WB7 (C2)	WC34 (C0)	WR19 (B1)
AJW10 (C1)	WB8 (C2)	WC35 (C0)	WR2 (A1)
AJW11 (D1)	WC1 (B2)	WC36 (C0)	WR21 (B2)
AJW12 (C0)	WC10 (B0)	WC4 (C2)	WR22 (B2)
AJW13 (C2)	WC11 (B0)	WC40 (A2)	WR23 (B2)
AJW14 (C2)	WC13 (B0)	WC44 (C0)	WR24 (B2)
AJW15 (C2)	WC14 (B0)	WC5 (C1)	WR25 (A1)
AJW16 (C2)	WC15 (B0)	WC6 (B2)	WR26 (A1)
AJW17 (C2)	WC16 (B0)	WC7 (C1)	WR27 (A1)
AJW18 (D1)	WC17 (B1)	WC8 (C1)	WR29 (C1)
AJW2 (A1)	WC18 (B1)	WC9 (B0)	WR3 (C2)
AJW3 (A1)	WC19 (A2)	WIC01 (B1)	WR30 (C1)
AJW4 (A1)	WC2 (B2)	WIC02 (C0)	WR31 (C1)
AJW5 (A1)	WC20 (B1)	WIC03 (A0)	WR32 (C1)
AJW6 (A0)	WC21 (A2)	WJW1 (B2)	WR33 (B1)
AJW7 (A1)	WC22 (B1)	WJW2 (A1)	WR34 (D2)
AJW8 (A1)	WC23 (B1)	WQ10 (C2)	WR36 (C0)
AJW9 (C1)	WC24 (B1)	WR1 (B1)	WR37 (D0)
AWR1 (C2)	WC25 (B1)	WR10 (B0)	WR4 (C2)
AWR2 (C1)	WC27 (A1)	WR11 (B0)	WR5 (C1)
AWR3 (C1)	WC28 (B2)	WR12 (B0)	WR6 (C1)
WB1 (C0)	WC29 (C1)	WR13 (B0)	WR7 (C1)
WB2 (C1)	WC3 (C1)	WR14 (B0)	WR8 (B0)
WB3 (C2)	WC30 (C1)	WR15 (B0)	WR9 (B0)

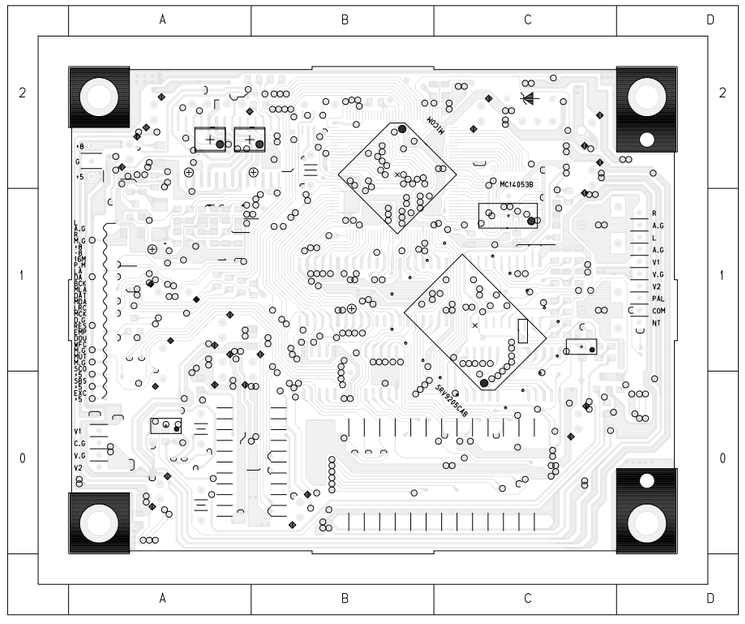
10-4-3 CD SUB



*** RESISTOR ***	*** CONDENSER ***	*** DIODE ***	*** TR ***	*** IC&WAFER ***
SR1 (F1)	SC1 (E0)	SZD1 (E0)	SIC4 (E0)	SCW5 (G0)
SR2 (F1)	SC10 (F0)	SZD2 (D0)		SIC1 (E0)
SR3 (F1)	SC11 (E1)	SZD3 (D0)		SIC2 (D0)
SR4 (F1)	SC12 (F1)			SIC3 (D0)
SR5 (F1)	SC2 (D0)			
SR6 (A0)	SC3 (D0)			
	SC4 (E1)			
	SC5 (G0)			
	SC6 (E0)			
	SC7 (E0)			
	SC8 (G0)			
	SC9 (G0)			

10-5 Video CD

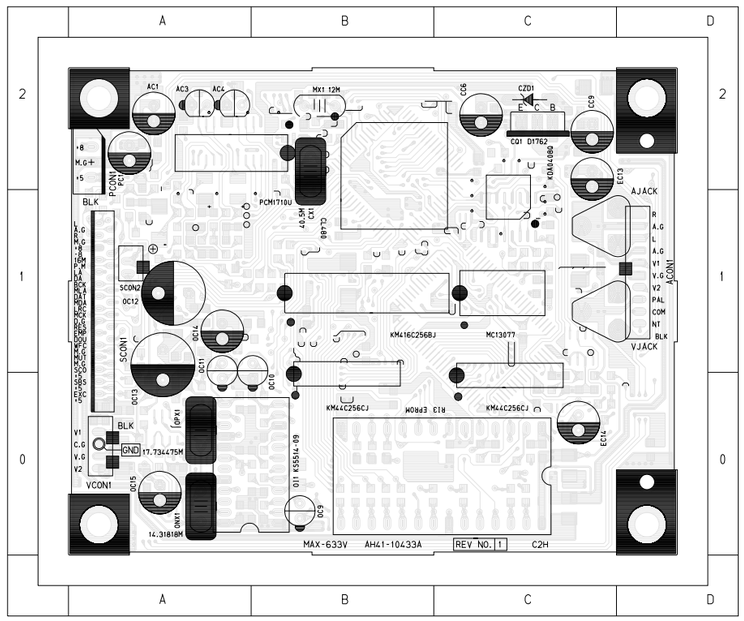
10-5-1 Top View



*** CHIP ***

AB1 (A2)	AQ1 (A1)	CC4 (C2)	EC1 (C1)	ER7 (C1)	MNJ1 (C2)	OPJ1 (A0)	RC2 (B0)	VEC1 (C1)
AC2 (A2)	AQ2 (A1)	CC5 (B2)	EC10 (C1)	ER8 (C1)	MPJ1 (C2)	OPR1 (A0)	RC3 (B1)	VEC2 (C1)
AI1 (A2)	ARC1 (A2)	CC7 (B2)	EC11 (C1)	ER9 (C1)	MR1 (B2)	OQ1 (A0)	RC4 (B1)	VEC3 (C1)
AL1 (A2)	ARC2 (A1)	CC8 (C2)	EC12 (C1)	GC1 (C0)	MR2 (B1)	OQ2 (A1)	RI1 (B1)	VEI1 (C1)
ALC1 (A2)	ARC3 (A1)	CI1 (B2)	EC15 (C0)	GC2 (C0)	MR3 (B1)	OQ3 (A1)	RI2 (B0)	VJ1 (A0)
ALC2 (A1)	ARC4 (A1)	CI2 (C1)	EC2 (C1)	GC3 (C0)	MR4 (B1)	OR1 (B0)	RJ1 (B1)	VJ2 (A0)
ALC3 (A1)	ARC5 (A1)	CI3 (B2)	EC3 (C1)	GC4 (C0)	MR5 (B1)	OR10 (A0)	RJ256 (C0)	
ALC4 (A1)	ARC6 (A1)	CJ1 (C1)	EC4 (C1)	GI1 (C1)	MR6 (B1)	OR11 (A0)	RJ512 (C0)	
ALC5 (A1)	ARI1 (A2)	CJ2 (A1)	EC5 (C1)	GI2 (C0)	OC1 (A0)	OR12 (A0)	RR1 (C0)	
ALC6 (A1)	ARJ1 (A1)	CJ3 (A1)	EC6 (C2)	GI3 (C0)	OC16 (A0)	OR13 (B0)	RR10 (B0)	
ALI1 (A2)	ARQ1 (A1)	CR1 (B2)	EC7 (C1)	GJ1 (A1)	OC17 (A0)	OR2 (B0)	RR11 (C0)	
ALJ1 (A1)	ARR1 (A1)	CR10 (C2)	EC8 (C1)	GJ2 (A1)	OC2 (B0)	OR3 (A0)	RR12 (C0)	
ALJ2 (A2)	ARR10 (A2)	CR11 (C2)	EC9 (C1)	GJ3 (A0)	OC3 (B0)	OR4 (B0)	RR13 (C0)	
ALQ1 (A1)	ARR11 (A2)	CR12 (B2)	EI1 (C1)	GJ4 (C1)	OC4 (A0)	OR5 (A0)	RR2 (B0)	
ALR1 (A1)	ARR2 (A1)	CR13 (B2)	EI2 (C1)	GR1 (C2)	OC5 (B0)	OR6 (A1)	RR3 (B0)	
ALR10 (A1)	ARR3 (A1)	CR14 (B2)	EL1 (C1)	GR2 (C1)	OC6 (B0)	OR7 (A1)	RR4 (B0)	
ALR11 (A1)	ARR4 (A1)	CR15 (B2)	EQ1 (C0)	GR3 (C1)	OC7 (B0)	OR8 (A1)	RR5 (B0)	
ALR2 (A1)	ARR5 (A1)	CR16 (B1)	EQ2 (C0)	GR4 (C0)	OC8 (A0)	OR9 (A1)	RR6 (B0)	
ALR3 (A1)	ARR6 (A1)	CR17 (B2)	ER1 (C1)	GR5 (C0)	OD1 (B1)	PB1 (C2)	RR7 (B0)	
ALR4 (A1)	ARR7 (A1)	CR2 (B2)	ER10 (D0)	GR6 (C0)	OI2 (A0)	PC2 (A2)	RR8 (B0)	
ALR5 (A1)	ARR8 (A1)	CR3 (B2)	ER11 (C1)	JW1 (A0)	OI3 (A0)	PC3 (A2)	RR9 (B0)	
ALR6 (A1)	ARR9 (A1)	CR4 (B1)	ER12 (C0)	JW2 (D0)	OL1 (B0)	PC4 (A2)	SI1 (C1)	
ALR7 (A1)	AVJ1 (C1)	CR5 (B1)	ER2 (C1)	MC1 (B2)	OL2 (B1)	PC5 (A2)	SJ1 (A0)	
ALR8 (A1)	CC1 (B2)	CR6 (B2)	ER3 (C1)	MC2 (B2)	ONC1 (A0)	PR1 (A1)	SJ2 (A0)	
ALR9 (A1)	CC10 (C2)	CR7 (A1)	ER4 (C1)	MC3 (A1)	ONJ1 (A0)	RB1 (C0)	SJ3 (A0)	
AMGL1 (A1)	CC2 (B2)	CR8 (A1)	ER5 (C1)	MD1 (C2)	ONR1 (A0)	RB2 (C0)	SJ4 (A0)	
AMGL2 (A2)	CC3 (B1)	CR9 (A1)	ER6 (C1)	MI1 (B2)	OPC1 (A0)	RC1 (C0)	VB1 (A0)	

10-5-2 Bottom View

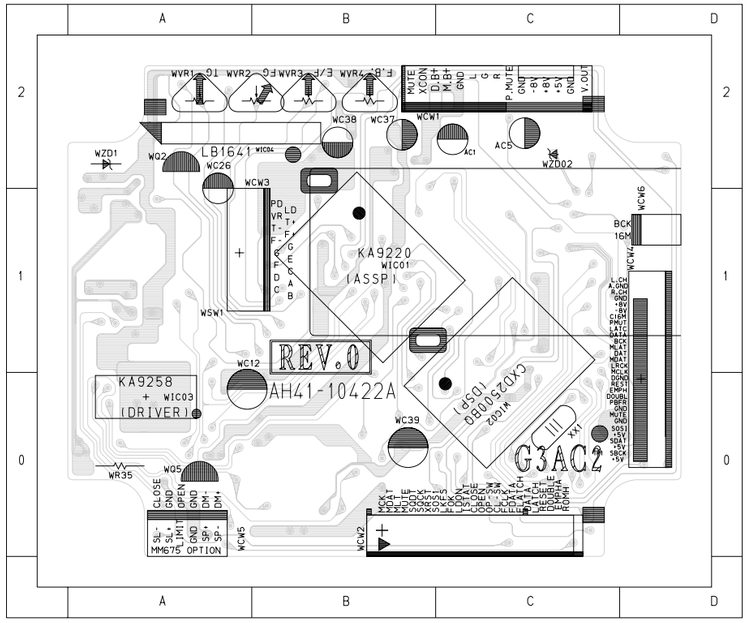


*** CHIP ***

AB1 (A2)	AQ1 (A1)	CC4 (C2)	EC1 (C1)	ER7 (C1)	MNJ1 (C2)	OPJ1 (A0)	RC2 (B0)	VEC1 (C1)
AC2 (A2)	AQ2 (A1)	CC5 (B2)	EC10 (C1)	ER8 (C1)	MPJ1 (C2)	OPR1 (A0)	RC3 (B1)	VEC2 (C1)
AI1 (A2)	ARC1 (A2)	CC7 (B2)	EC11 (C1)	ER9 (C1)	MR1 (B2)	OQ1 (A0)	RC4 (B1)	VEC3 (C1)
AL1 (A2)	ARC2 (A1)	CC8 (C2)	EC12 (C1)	GC1 (C0)	MR2 (B1)	OQ2 (A1)	RI1 (B1)	VEI1 (C1)
ALC1 (A2)	ARC3 (A1)	CI1 (B2)	EC15 (C0)	GC2 (C0)	MR3 (B1)	OQ3 (A1)	RI2 (B0)	VJ1 (A0)
ALC2 (A1)	ARC4 (A1)	CI2 (C1)	EC2 (C1)	GC3 (C0)	MR4 (B1)	OR1 (B0)	RJ1 (B1)	VJ2 (A0)
ALC3 (A1)	ARC5 (A1)	CI3 (B2)	EC3 (C1)	GC4 (C0)	MR5 (B1)	OR10 (A0)	RJ256 (C0)	
ALC4 (A1)	ARC6 (A1)	CJ1 (C1)	EC4 (C1)	GI1 (C1)	MR6 (B1)	OR11 (A0)	RJ512 (C0)	
ALC5 (A1)	ARI1 (A2)	CJ2 (A1)	EC5 (C1)	GI2 (C0)	OC1 (A0)	OR12 (A0)	RR1 (C0)	
ALC6 (A1)	ARJ1 (A1)	CJ3 (A1)	EC6 (C2)	GI3 (C0)	OC16 (A0)	OR13 (B0)	RR10 (B0)	
ALI1 (A2)	ARQ1 (A1)	CR1 (B2)	EC7 (C1)	GJ1 (A1)	OC17 (A0)	OR2 (B0)	RR11 (C0)	
ALJ1 (A1)	ARR1 (A1)	CR10 (C2)	EC8 (C1)	GJ2 (A1)	OC2 (B0)	OR3 (A0)	RR12 (C0)	
ALJ2 (A2)	ARR10 (A2)	CR11 (C2)	EC9 (C1)	GJ3 (A0)	OC3 (B0)	OR4 (B0)	RR13 (C0)	
ALQ1 (A1)	ARR11 (A2)	CR12 (B2)	EI1 (C1)	GJ4 (C1)	OC4 (A0)	OR5 (A0)	RR2 (B0)	
ALR1 (A1)	ARR2 (A1)	CR13 (B2)	EI2 (C1)	GR1 (C2)	OC5 (B0)	OR6 (A1)	RR3 (B0)	
ALR10 (A1)	ARR3 (A1)	CR14 (B2)	EL1 (C1)	GR2 (C1)	OC6 (B0)	OR7 (A1)	RR4 (B0)	
ALR11 (A1)	ARR4 (A1)	CR15 (B2)	EQ1 (C0)	GR3 (C1)	OC7 (B0)	OR8 (A1)	RR5 (B0)	
ALR2 (A1)	ARR5 (A1)	CR16 (B1)	EQ2 (C0)	GR4 (C0)	OC8 (A0)	OR9 (A1)	RR6 (B0)	
ALR3 (A1)	ARR6 (A1)	CR17 (B2)	ER1 (C1)	GR5 (C0)	OD1 (B1)	PB1 (C2)	RR7 (B0)	
ALR4 (A1)	ARR7 (A1)	CR2 (B2)	ER10 (D0)	GR6 (C0)	OI2 (A0)	PC2 (A2)	RR8 (B0)	
ALR5 (A1)	ARR8 (A1)	CR3 (B2)	ER11 (C1)	JW1 (A0)	OI3 (A0)	PC3 (A2)	RR9 (B0)	
ALR6 (A1)	ARR9 (A1)	CR4 (B1)	ER12 (C0)	JW2 (D0)	OL1 (B0)	PC4 (A2)	SI1 (C1)	
ALR7 (A1)	AVJ1 (C1)	CR5 (B1)	ER2 (C1)	MC1 (B2)	OL2 (B1)	PC5 (A2)	SJ1 (A0)	
ALR8 (A1)	CC1 (B2)	CR6 (B2)	ER3 (C1)	MC2 (B2)	ONC1 (A0)	PR1 (A1)	SJ2 (A0)	
ALR9 (A1)	CC10 (C2)	CR7 (A1)	ER4 (C1)	MC3 (A1)	ONJ1 (A0)	RB1 (C0)	SJ3 (A0)	
AMGL1 (A1)	CC2 (B2)	CR8 (A1)	ER5 (C1)	MD1 (C2)	ONR1 (A0)	RB2 (C0)	SJ4 (A0)	
AMGL2 (A2)	CC3 (B1)	CR9 (A1)	ER6 (C1)	MI1 (B2)	OPC1 (A0)	RC1 (C0)	VB1 (A0)	

10-4 CD

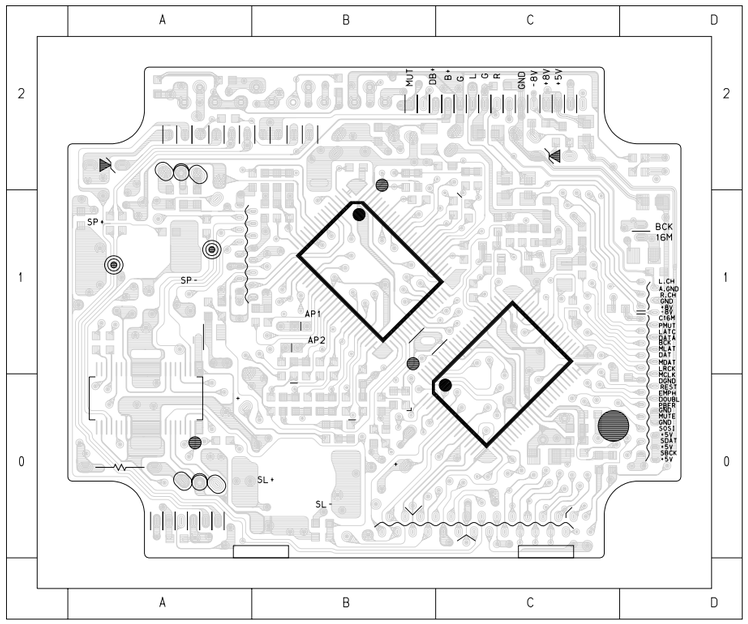
10-4-1 Top View



*** CHIP ***

AC2 (C1)	WB4 (D1)	WC31 (D2)	WR16 (B0)
AC3 (B2)	WB5 (D1)	WC32 (B0)	WR17 (B0)
AC4 (C2)	WB6 (C2)	WC33 (B0)	WR18 (B1)
AJW1 (A0)	WB7 (C2)	WC34 (C0)	WR19 (B1)
AJW10 (C1)	WB8 (C2)	WC35 (C0)	WR2 (A1)
AJW11 (D1)	WC1 (B2)	WC36 (C0)	WR21 (B2)
AJW12 (C0)	WC10 (B0)	WC4 (C2)	WR22 (B2)
AJW13 (C2)	WC11 (B0)	WC40 (A2)	WR23 (B2)
AJW14 (C2)	WC13 (B0)	WC44 (C0)	WR24 (B2)
AJW15 (C2)	WC14 (B0)	WC5 (C1)	WR25 (A1)
AJW16 (C2)	WC15 (B0)	WC6 (B2)	WR26 (A1)
AJW17 (C2)	WC16 (B0)	WC7 (C1)	WR27 (A1)
AJW18 (D1)	WC17 (B1)	WC8 (C1)	WR29 (C1)
AJW2 (A1)	WC18 (B1)	WC9 (B0)	WR3 (C2)
AJW3 (A1)	WC19 (A2)	WIC01 (B1)	WR30 (C1)
AJW4 (A1)	WC2 (B2)	WIC02 (C0)	WR31 (C1)
AJW5 (A1)	WC20 (B1)	WIC03 (A0)	WR32 (C1)
AJW6 (A0)	WC21 (A2)	WJW1 (B2)	WR33 (B1)
AJW7 (A1)	WC22 (B1)	WJW2 (A1)	WR34 (D2)
AJW8 (A1)	WC23 (B1)	WQ10 (C2)	WR36 (C0)
AJW9 (C1)	WC24 (B1)	WR1 (B1)	WR37 (D0)
AWR1 (C2)	WC25 (B1)	WR10 (B0)	WR4 (C2)
AWR2 (C1)	WC27 (A1)	WR11 (B0)	WR5 (C1)
AWR3 (C1)	WC28 (B2)	WR12 (B0)	WR6 (C1)
WB1 (C0)	WC29 (C1)	WR13 (B0)	WR7 (C1)
WB2 (C1)	WC3 (C1)	WR14 (B0)	WR8 (B0)
WB3 (C2)	WC30 (C1)	WR15 (B0)	WR9 (B0)

10-4-2 Bottom View

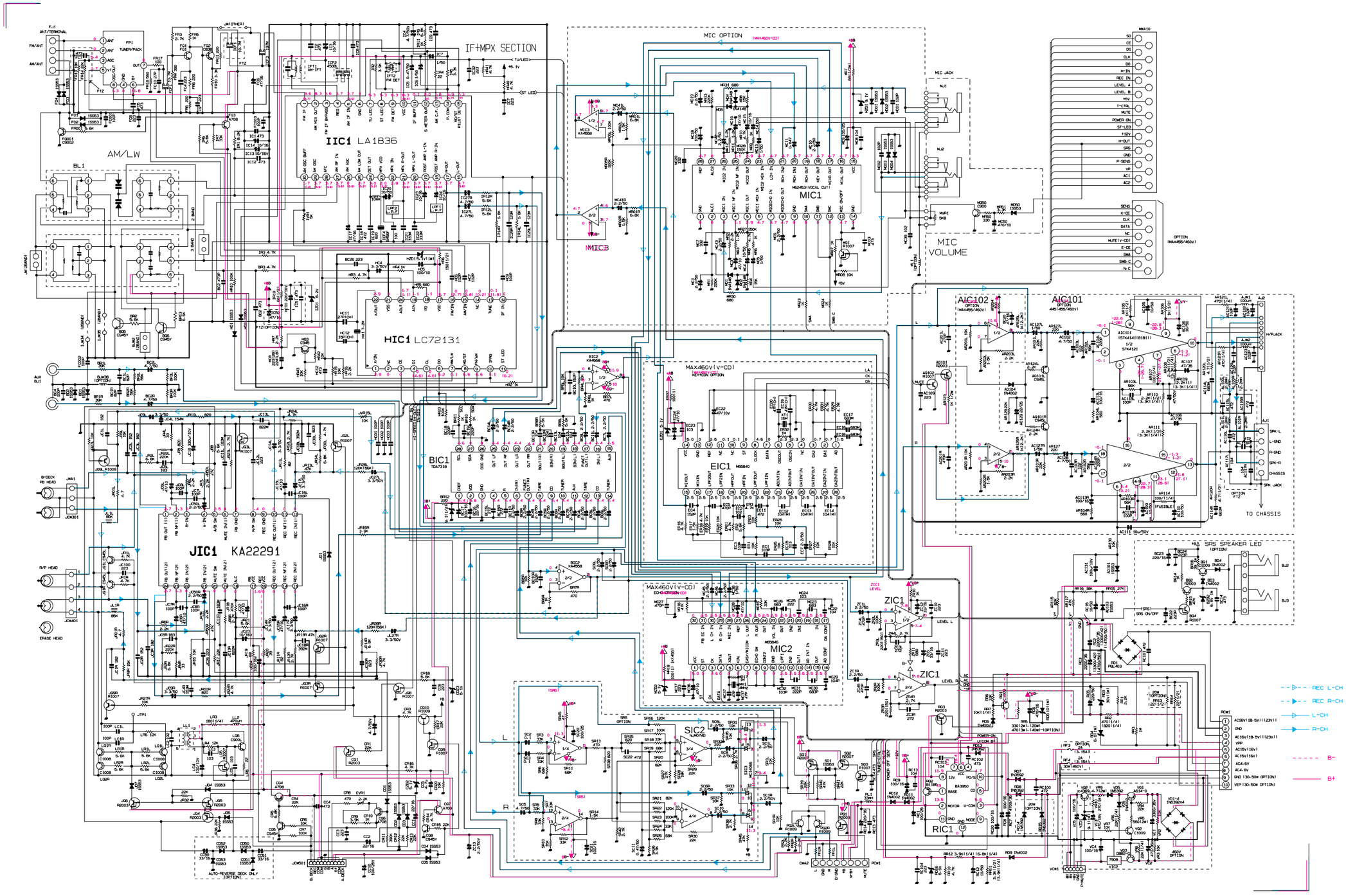


*** CHIP ***

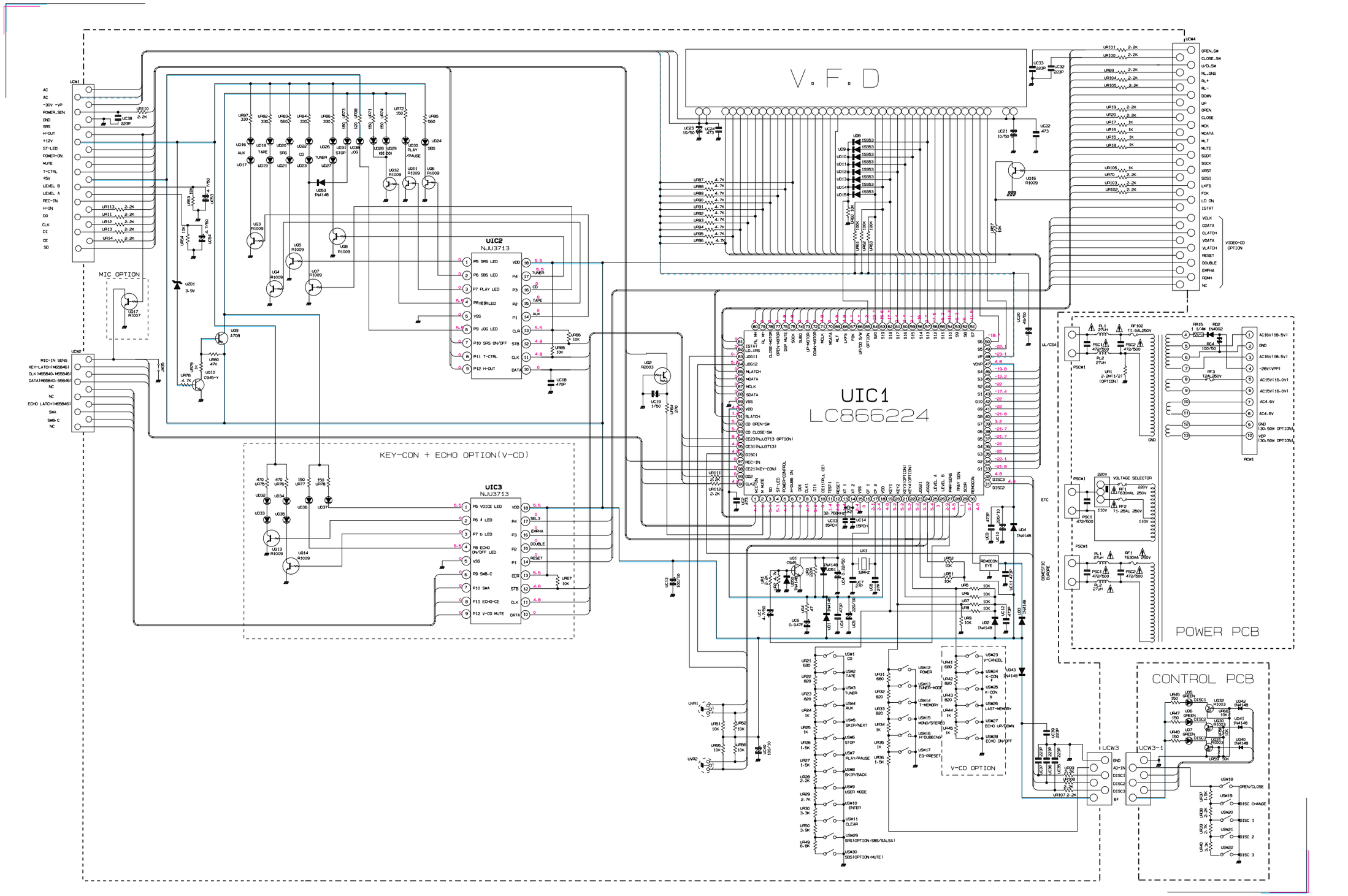
AC2 (C1)	WB4 (D1)	WC31 (D2)	WR16 (B0)
AC3 (B2)	WB5 (D1)	WC32 (B0)	WR17 (B0)
AC4 (C2)	WB6 (C2)	WC33 (B0)	WR18 (B1)
AJW1 (A0)	WB7 (C2)	WC34 (C0)	WR19 (B1)
AJW10 (C1)	WB8 (C2)	WC35 (C0)	WR2 (A1)
AJW11 (D1)	WC1 (B2)	WC36 (C0)	WR21 (B2)
AJW12 (C0)	WC10 (B0)	WC4 (C2)	WR22 (B2)
AJW13 (C2)	WC11 (B0)	WC40 (A2)	WR23 (B2)
AJW14 (C2)	WC13 (B0)	WC44 (C0)	WR24 (B2)
AJW15 (C2)	WC14 (B0)	WC5 (C1)	WR25 (A1)
AJW16 (C2)	WC15 (B0)	WC6 (B2)	WR26 (A1)
AJW17 (C2)	WC16 (B0)	WC7 (C1)	WR27 (A1)
AJW18 (D1)	WC17 (B1)	WC8 (C1)	WR29 (C1)
AJW2 (A1)	WC18 (B1)	WC9 (B0)	WR3 (C2)
AJW3 (A1)	WC19 (A2)	WIC01 (B1)	WR30 (C1)
AJW4 (A1)	WC2 (B2)	WIC02 (C0)	WR31 (C1)
AJW5 (A1)	WC20 (B1)	WIC03 (A0)	WR32 (C1)
AJW6 (A0)	WC21 (A2)	WJW1 (B2)	WR33 (B1)
AJW7 (A1)	WC22 (B1)	WJW2 (A1)	WR34 (D2)
AJW8 (A1)	WC23 (B1)	WQ10 (C2)	WR36 (C0)
AJW9 (C1)	WC24 (B1)	WR1 (B1)	WR37 (D0)
AWR1 (C2)	WC25 (B1)	WR10 (B0)	WR4 (C2)
AWR2 (C1)	WC27 (A1)	WR11 (B0)	WR5 (C1)
AWR3 (C1)	WC28 (B2)	WR12 (B0)	WR6 (C1)
WB1 (C0)	WC29 (C1)	WR13 (B0)	WR7 (C1)
WB2 (C1)	WC3 (C1)	WR14 (B0)	WR8 (B0)
WB3 (C2)	WC30 (C1)	WR15 (B0)	WR9 (B0)

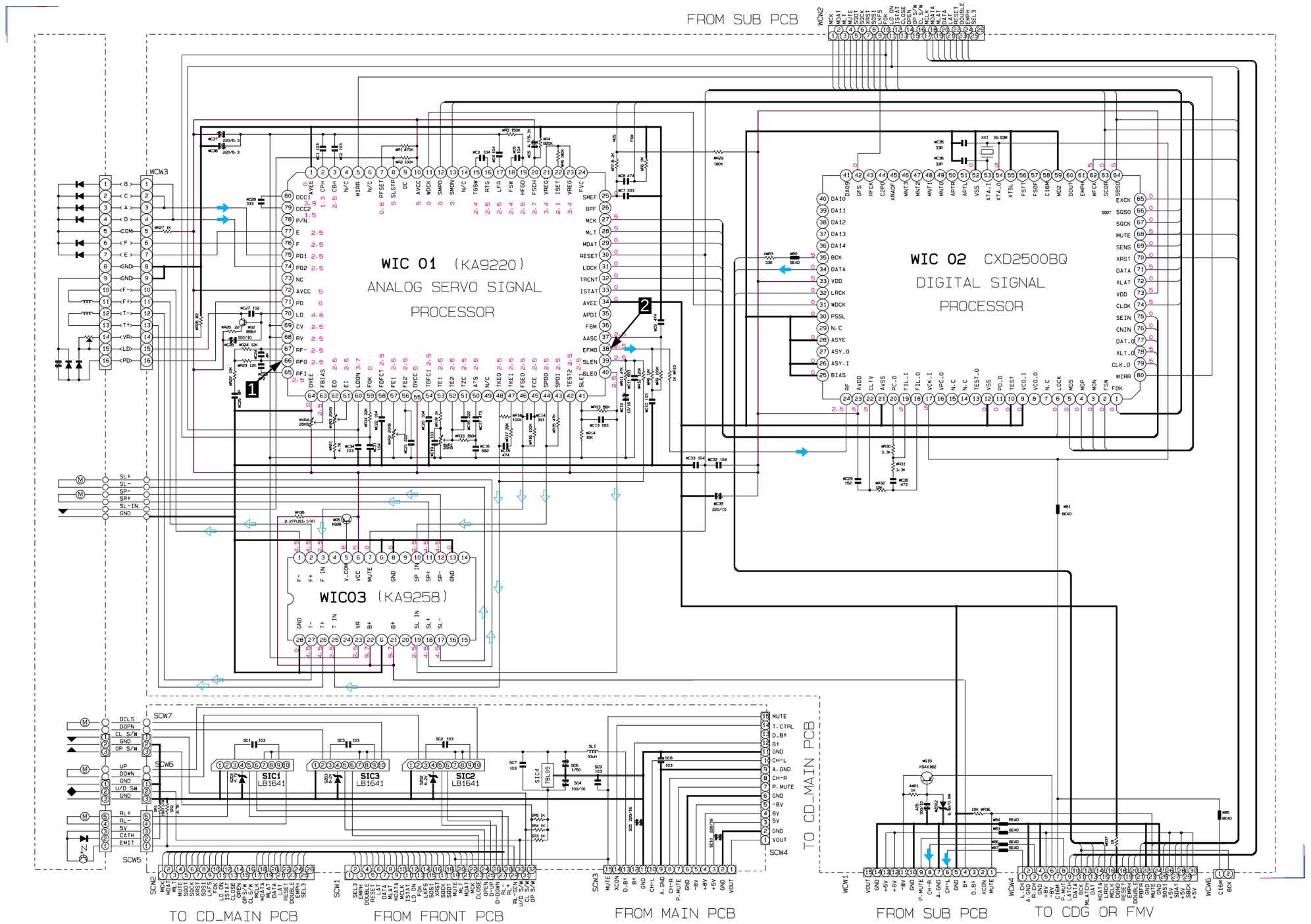
12. Schematic Diagrams

12-1 Main

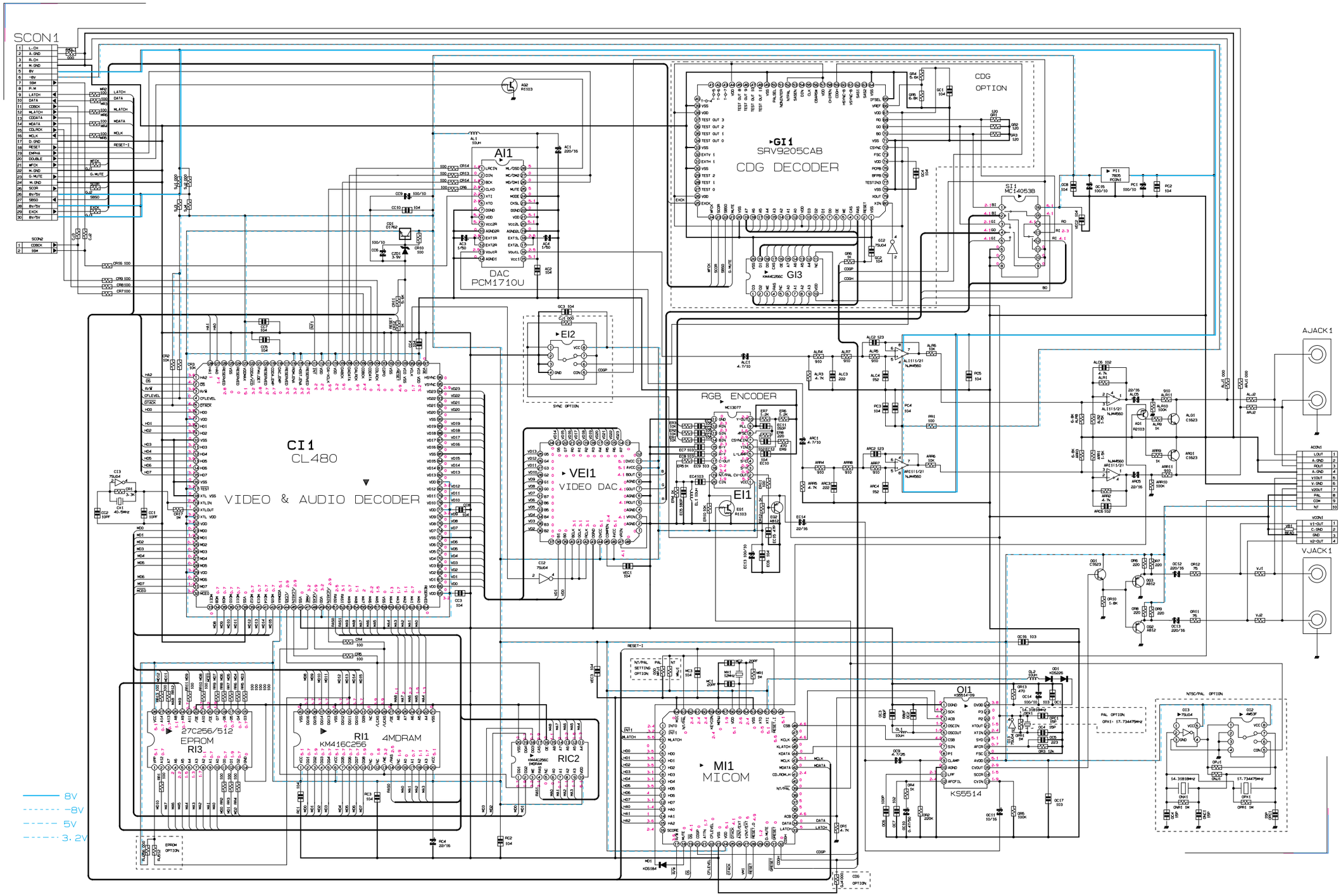


12-2 Front


V.F.D
UIC1
LC866224
UIC2
NJU3713
UIC3
NJU3713
KEY-CON + ECHO OPTION(V-CD)
MIC OPTION
V-CD OPTION
POWER PCB
CONTROL PCB
VIDEO-CD OPTION
DOMESTIC EUROPE
ETC
UL/CSA
VOLTAGE SELECTOR
OPEN/CLOSE
OPEN_SW
CLOSE_SW
U/D_SW
DOWN
UP
OPEN
CLOSE
MCK
MDATA
MLT
MUTE
SDDT
SDCK
XRST
SDSI
LKFS
FOK
LD ON
ISTAT
VCLK
CDATA
CLATCH
VDATA
VLATCH
RESET
DOUBLE
EMPHA
ROMH
NC


FROM SUB PCB
WCW2
WIC 01 (KA9220)
ANALOG SERVO SIGNAL
PROCESSOR
WIC 02 CXD2500BQ
DIGITAL SIGNAL
PROCESSOR
WIC03 (KA9258)
SIC1 LB1641
SIC3 LB1641
SIC2 LB1641
SIC4 78L05
WCW3
SCW7
SCW5
SCW4
SCW2
SCW1
SCW3
TO CD_MAIN PCB
FROM FRONT PCB
FROM MAIN PCB
FROM SUB PCB
TO CDG OR FMV
TO CD_MAIN PCB
WCW1
WCW4
WCW6

12-4 Video CD


SCON1
CI1
CL480
VIDEO & AUDIO DECODER
AI1
DAC
PCM1710U
GI1
SRV9205CAB
CDG DECODER
CDG
OPTION
GI3
SI1
MC14053B
EI2
SYNC OPTION
RGB ENCODER
MC13077
VEI1
VIDEO DAC
EI1
RI1
4MDRAM
KM416C256
RI3
27C256/512
EPROM
RIC2
MI1
MICOM
OI1
KS5514-09
KS5514
AJACK1
VJACK1
PAL OPTION
NTSC/PAL OPTION
8V
-8V
5V
3.2V